



Annual Report for Sauri, Kenya

MILLENNIUM RESEARCH VILLAGE

July 2005 to June 2006

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Millennium PROMISE



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Introduction

This report contains the major happenings and outputs of the Millennium Villages Project between July 2005 and June 2006. The report is presented within a Sectoral framework that follows the specific MDGs and corresponds with the approach the project is using in the implementation process. Each section is broken down into two 6-month time periods: July 2005 through December 2005, and January 2006 through June 2006.

The activities in Sauri have been geared towards achieving the Millennium Development Goals. The community structures and local leadership involved in the project are sector based as well. The sectors presented are Agriculture, Health, Water and Sanitation, Energy, Roads and Communication, Education, Business, Environment, and Community Development. Other areas also presented briefly include cost sharing in the program and a list of visitors received by the Sauri Millennium Village during this time period.



Executive Summary

In mid-2005, the Sauri community wrote a community constitution that guides and shapes the project's activities within the community. Using this constitution, they elected members to an Executive Committee for overseeing community activities and progress.

The Executive Committee underwent training and developed a plan of action for project activities and community organizing.

The maize harvest in July and August of 2005 brought an average yield of 4.9 tons/hectare of standing maize. The total value of the harvest (bagged) maize, calculated at \$20/bag of maize, was equivalent to \$212,400; this represents a return to investment three times that of the cost of the fertilizer and seeds (\$69,465). The Agriculture committee established a Cereal Bank and an emergency micro-credit system, and held trainings for farmers on post harvest handling and storage, cereal banking, growing of indigenous vegetables, composting, soil and water conservation, and field visits. In early 2006 preparation began for the next maize crop. Land was prepared, inputs were distributed, and planting, topdressing, and improved fallows planting took place. In the interest of crop diversification, producer groups were formed for various new crops. The feasibility of aquaculture was assessed and was deemed viable for 6 sites.

Heavy rains and limited storage for surplus farm produce led the Welfare Committee, in conjunction with the Executive Committee, to request urgent help from MVP to construct and repair homes for the poorest households in Sauri, most of which are headed by widows or the disabled. As a result, 46 houses in critical condition (four from each villages) were rehabilitated for this needy group.

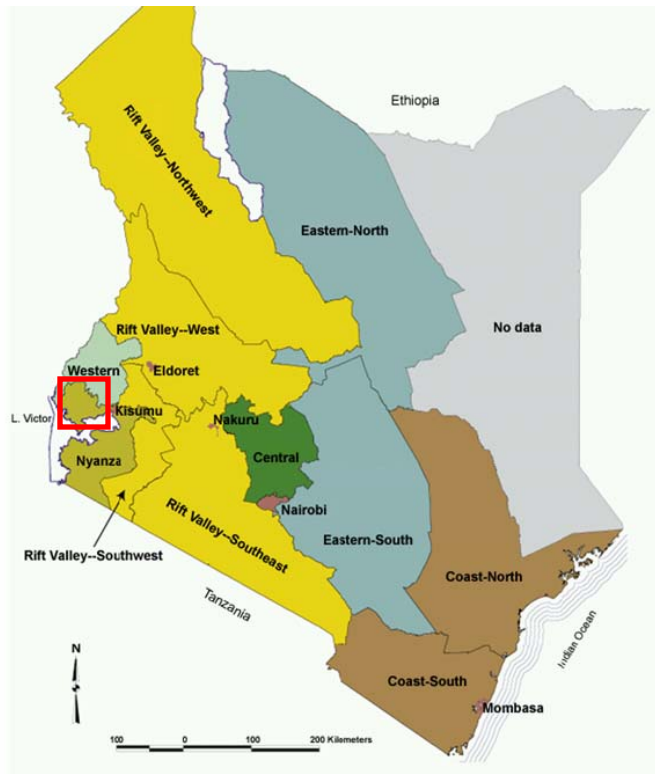
The Sauri Community Dispensary opened in July 2005, offering a wide range of clinical services including immunizations, pregnancy tests, stool analysis, ante-natal care, child growth monitoring, and malaria control. In its first six months the clinic saw 11,818 patient cases, 6,730 were Sauri residents. Acting in cooperation with Ministry of Health regulations, the community selected a Health Management team to steer health issues in the community. The Health Team was trained on Millennium Villages Project activities and principles, community health care, proposal writing, and conflict resolution. Community Health Workers were trained in indoor residual spraying, childhood illness, and sanitation and hygiene.

The Water Supply and Sanitation Committee has received training on spring development, including groundwater hydrology and spring protection; rainwater harvesting for home consumption and small-scale irrigation; and safe water systems for human use. The committee worked to identify 15 priority springs for protection or repairing, and constructed roof-based rainwater harvesting systems after their training. The Misango Arts Ensemble, a theater for development group, has been promoting hygiene and sanitation practices through drama groups. A pit latrine was constructed at Bar Sauri primary school to enable improved hygiene, privacy, safety in school, and boosting attendance by girls.

The Water Committee and the Environment committee planted indigenous trees around selected springs to protect them from damage by erosion and animals. The Environment Committee also began a tree nursery for each of the villages in Sauri and planted a total of 255 seedlings on the national tree planting day.

Improvements were made in infrastructure, energy, transport, and communications. A village vehicle was purchased and modified according to specifications to serve as an ambulance and marketing vehicle. Sauri Media Times is an initiative from the youth in the community to build an information system both within Sauri and externally. Improved Household cook stoves, which are locally referred to as “upes (quick) jikos” and are less smoky and more efficient in time and fuelwood, were installed in demonstration households.

The education committee spearheaded the sponsorship of bright and needy students to attend secondary school, establishment of community learning and resource centre, creation of a school meals program and creation of a capacity building program. The Business Committee was trained on entrepreneurship, leadership, and business planning; they subsequently held a workshop to train villagers in these skills. 16 of the 21 participants were women.



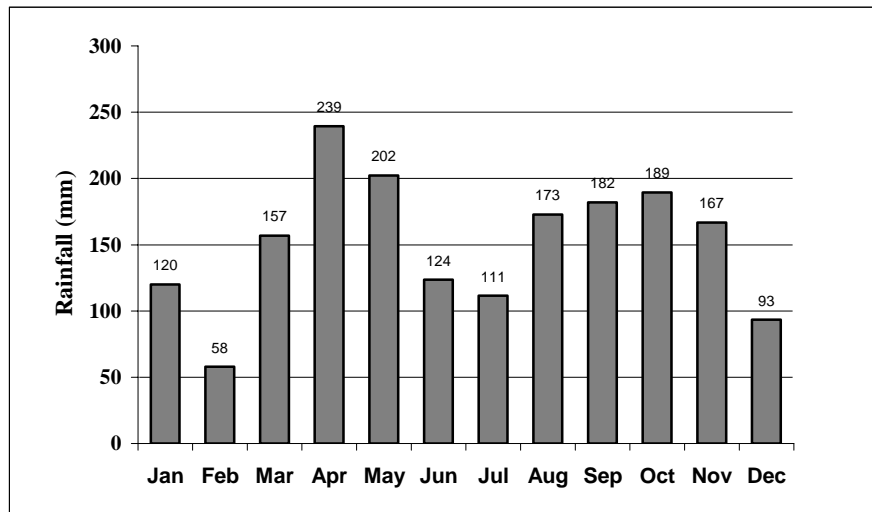
Background Information

The Sauri Millennium Village was launched officially in July 2004 by Prof. Jeffrey Sachs, The Earth Institute team, and Kenya government officials. Activities began in late 2004, information from the first six months are presented in the first Sauri Annual report. The report is the second in the series.

Sauri is located in the Kenya highlands, 1400-1500 meters above sea level, west of the Rift Valley and 30 km north of Lake Victoria. The equator lies just to the south of Sauri (0° 06N). The general topography is undulating with ephemeral streams, rivers and wetlands meandering through the rounded hills.

Climate: The area is classified as the subhumid tropics with an average temperature of 24°C, ranging from 18 to 27°C with an annual rainfall of 1800 mm (Figure 1). Rainfall is bimodal, divided into the long rainy season from March to June (1120 mm) and the short rainy season from September to December (710 mm). The short rains are extremely variable but highly predictable due to strong influence of the El Nino Southern Oscillation.

Figure 1. Monthly mean rainfall in Sauri from Yala weather station, 1996-2004



Soils: The main soils, classified as Oxisols/Nitisols (Kandiudalfic Eutrodox) are clayey, reddish, deep, and well drained. Derived from volcanic materials the soils were once quite fertile but are now depleted in nitrogen (N) and phosphorus (P), two of the essential nutrients for plant growth. pH borders around 5.5 though soil acidity is not a major problem for plant growth. Soil carbon levels (1.3% C) are half that of the ‘native’ soils. There are some patches of wetland soils along the rivers and streams.

Administrative/Political: The Sauri sublocation is within Yala Division, Siaya District, Nyanza Province in the western region of Kenya. The sublocation covers 8 sq km and includes 11 villages. A chief (covering the location), assistant chief (sub location) and village elders undergo interview processes, and are representatives of the Office of the President; a Councilor is elected by the villagers.

Agroecological Zone/Farming System: This area is a maize-based farming system according to Dixon’s classification (2001). Other crops include beans, sweet potatoes, bananas/plantains, cassava, kale, tomatoes, and onions. The bimodal rainfall and high temperature allows two crops per year, though the short rainy season is risky with 45% of the crop failing during that season (relative to long rains).

Sociocultural: The sublocation is 99% populated by Kenyans from the Luo ethnic group. The main languages spoken in the sublocation are Dholuo, Kiswahili, and English. The Luo culture practices polygamous marriage.

Socioeconomic: The population density of Sauri is extremely high, close to 700 people per sq. kilometer. Households are scattered throughout the agricultural landscape (Figure 2). Agriculture is the primary livelihood in the area. The land area for farming is usually less than 0.5 ha per household. At the onset of the project insufficient food was produced for a family of 5 at current production levels. Sixty to 70% of the people in Siaya District live below the Kenyan poverty line of \$1/day (Figure 3). Over 20% of the children aged less than 5 years are underweight.

Figure 2. Subvillages, homesteads and land use in the Sauri Millennium Village

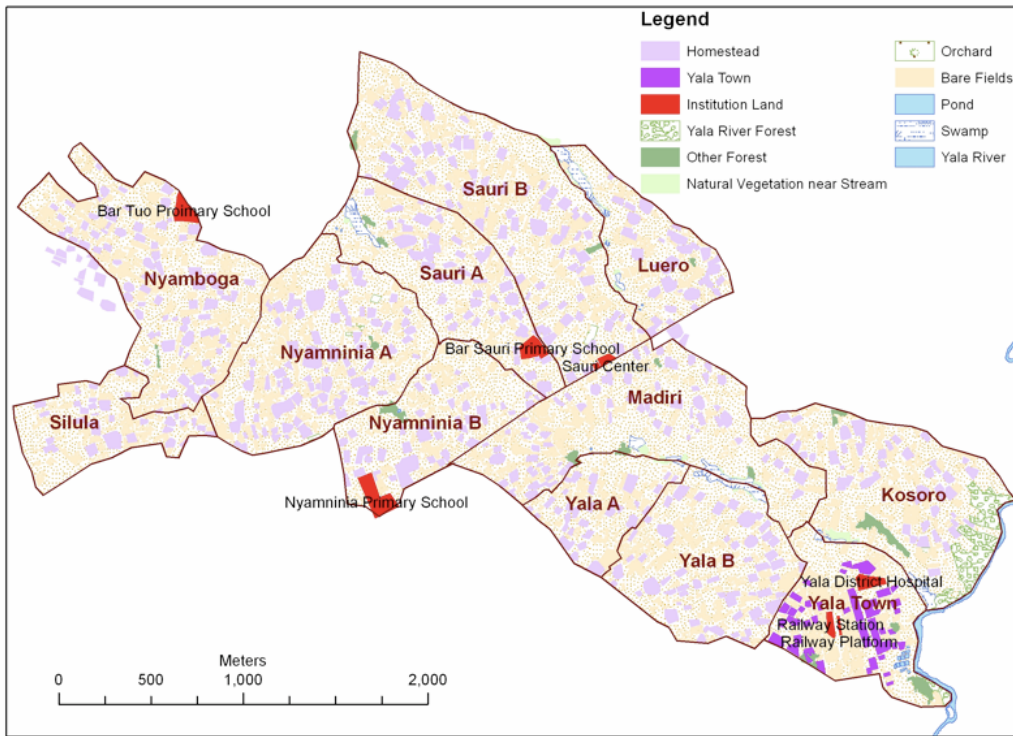
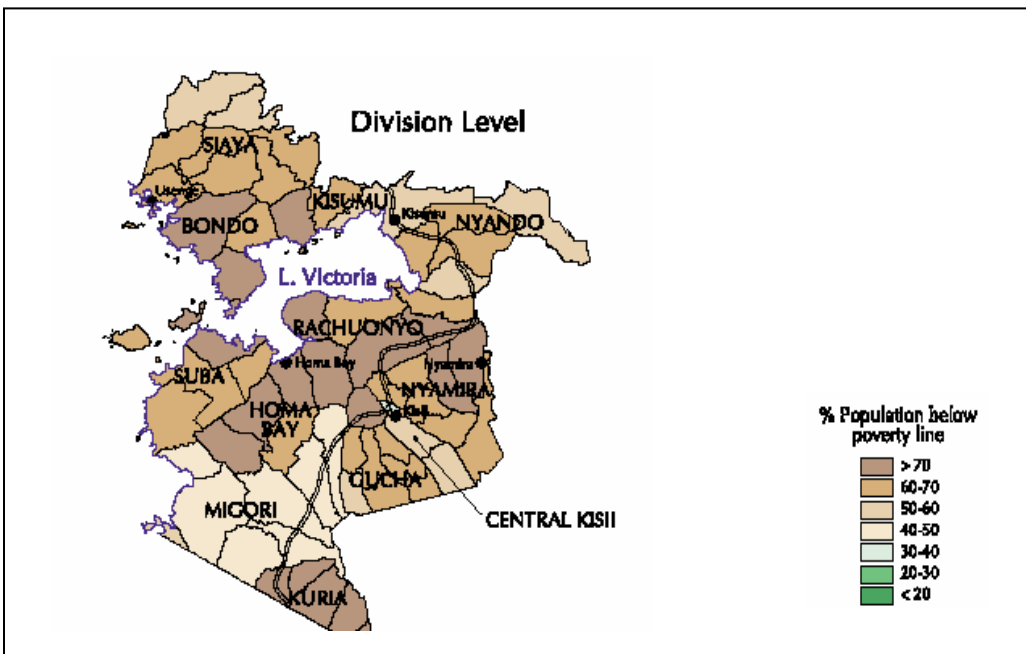


Figure 3. Poverty levels in Nyanza Province, Sauri is located in Siaya District where 60-70% of the population is below \$1 a day.



Infrastructure: The sub-location is adjacent to a major paved road that runs between Kisumu and Busia, with the nearest major town being Kisumu, 40km from the site. There are dirt roads that access the village. To the east of the sub-location there is a functioning rail line that goes to the towns of Butere and Kisumu. The electric grid is at the southern periphery of the village, with a small part of the site having grid access. The site is within cell phone range.

Community Development

Organizing the community and strengthening existing structures and institutions

In June, 2005 after the formation of the eight departmental committees and village committees, the community resolved to elect an umbrella committee to coordinate,



supervise, monitor and evaluate of these committees in conformity with the community's expectations. The sector committees normally meet every week on different days and at different venues as they discuss their plans, achievements, challenges and way forward. These are based on the feed backs they receive from villages representatives on how the community are reacting to their plans as a way of coming up with an all inclusive plans, Unlike the sectors committees the Executive Committee which is the mouth piece of the community meets every month to get progress reports from the sector committees and the community view and react to these plans as part of their monitoring and evaluation. The core functions include development planning and coordination, security, liaison to the project and visitors, etc.

The Executive Committee elected twenty two persons comprising of eight departmental chairpersons, eleven village chairpersons, Youth, Church, and the Disabled representatives. With the guidance of the facilitators, the team managed to write the Sauri community constitution that guides and shapes the project's activities within the community.

Using the constitution, the executive committee was further expanded to include eight subcommittees to facilitate and make the running of community activities fairly and effectively as follows:

- Finance subcommittee
- Welfare subcommittee
- Recruitment subcommittee
- Gender subcommittee
- Advisory subcommittee
- Disciplinary subcommittee
- Transport subcommittee
- Security subcommittee

With the guidance of the executive committee and the facilitators; Transport, Welfare, and Recruitment subcommittees have come up with their by-laws which regulate their operations.

Training of the Executive Committee

As part of community development, training of the executive committee was planned and executed in the month of June 2006. The key objective of the training was to identify the roles of the executive committee and other sector committees. The other aim was to get the overview reports from each of the sectors. The report included the key events in the sectors. In the plenary sessions, the leaders realized that the speed at which the implementation of the interventions were moving was so slow due to their personal differences, greed for power and lack of coordination of the project's activities. At this point, the training module catered for the conflict resolution which was extensively discussed. The training was attended by 10 males and 4 ladies who are members of committee. The eventual product expected from the training was a work plan with the way forward for the implementation of the resolutions during the exercise. This was developed in the second phase of the training which very much is inclined towards the transformation of Sauri in terms of attitudes and practices.

On the closing date they agreed on principles to ceremoniously bury their differences and instead concentrate on the following issues;

- (1) Start conducting community wide sensitization of their people on the project design, goals, objectives, and partnership approach in ensuring sustainable development.
- (2) Start having intersectoral meetings to provide all leaders with an opportunity of sharing their plans and coordination of activities. These meetings were to continue up to the village level under the chairmanship of the village development chairperson.
- (3) As a show of unity the leaders agreed as a matter of priority to start working on roads as a block and also to plan and organize a community fund drive to get funds for the purchase of land for building (a) community learning and resource center, and (b) Cereal bank.

Community Driven Housing Project for the Widows

House rehabilitation project started on August 2005 immediately as people looked for a place to store their bumper harvest but didn't have enough storage for their produce. Grass thatched houses, which are a good number in the village mostly belong to the widows have leaking roofs. Some of these houses are so small and used as kitchen, living and storage places. Where widows were left with more than 7 children to take care of, some children had resorted to look for sleeping sites outside the homesteads. The welfare sub committee in conjunction with the Executive Committee met requested MVP project to discuss the need for improving the condition of the houses belonging to the widows and other needy groups of the community. The committees discussed on the criteria of getting the beneficiaries and spelt out that for one to be involved in the scheme s/he must be a Sauri resident, a widow who is needy, a disabled person whose house is in dire need of repair, widows whose houses are leaking, have large families and their houses are too small. Both the committee and the project agreed to get the four critical houses from each of the villages' households whose houses needed urgent attention. Forty-six households were selected based on the laid down criteria.

For each house that was constructed, the project supported with an average of 30 pieces of iron sheet, 5kg of roofing nails and an average 15 pieces of ridge for joining up the edges of the iron sheet on the roof. This translated to an average cost of US \$ 273.60 per house. The community's effort has been realized in securing the poles for building, payment of the local technicians' fees, and the unskilled labor in the construction process.

Some of the key challenges were the mobilization of the community members to support the widows. The poor infrastructure in the village also made slightly difficult to supply the building materials timely. However, 46 improved houses have been put up for the widows courtesy to the synergy between the project and the community.

The rehabilitation of the houses has brought joy to many people and even have made some separated families rejoin together. With a good house, a person may have some peace and concentrate on other development project like business and farming. Some other households may still be in need of these kinds of help. We need to encourage other development partners to help in community house rehabilitation as much as they are doing in other developments.

Sectoral Reports

AGRICULTURE

July 2005-December 2005

Agricultural activities for this period include: the harvest festival held in July 2005; Community repayment of crop (maize) harvest to community feeding programs; storage of produce and progress with cereal bank establishment; short rains-2006 crops and inputs; improved fallows; soil and water conservation; mulching and trainings done during this period.

Harvest festival

A festival was organized to mark the first bumper harvest following MVP interventions in agriculture, towards meeting the ‘reduction of hunger and poverty goal’ of the MDGs (MDG 1). The festival was held in Sauri (trading centre and Bar Sauri Primary School) on the 21st July 2005. The function was attended by senior government officials including the ministers for Health (Hon. Charity Ngilu), and Planning and National Development (Hon. Prof. Peter Nyong’o), the permanent secretary for Agriculture (Mr Ongwae), other honorable members of parliament and senior government officials in the province (Nyanza) and district (Siaya). In attendance were dignitaries from the international community, including the Executive Director of UNICEF (Ms. Ann Veneman), special advisor to UN Secretary General on MDGs, and the Director of the Earth Institute at Columbia University (Prof. Jeffrey Sachs), MVP Director (Prof. Pedro Sanchez), UNDP Country Representative (Paul Andre de la Porte), Canadian Minister of Human Resources (Ms. Belinda Stronach) UN Millennium Project officials and donor community representatives.



Activities during the harvest festival included: introduction of guests and community representatives at Sauri Centre; tour of the Sauri community dispensary; harvesting exercise by dignitaries led by the Agriculture Committee on farms; exhibitions by committees; entertainment and refreshments; and speeches by community representatives and invited guests. During the speeches, the community was presented with the newly procured community vehicle and tasked by Prof.Sachs to develop management plans for the vehicle to serve the community.

Maize harvesting and food security in 2005

Maize was harvested in July/August 2005. Though the crop was generally excellent, many farmers reported having had problems with the crop due to striga weed and termite infestation. To establish the standing maize yield, sampling was done in 120 farms in the entire Sauri before farmers started to harvest any green maize. The average standing maize production in the farms was 4.9 t ha⁻¹. Thus, over the whole area (320 ha), the total standing maize was 1568 tons. However, our experience shows that 61% of the standing maize is normally available for storage at the end of the season, with the rest (39%) being harvested green for home consumption and post harvest losses. The total amount of harvested/bagged maize was 956 tons; it was more difficult to determine this value as it relied on reports by farmers (and probably represents underestimates since farmers knew they were to give a portion of their crop back). Household food demand (food security) in Sauri for one year is 550 tons, estimated using an individual's average requirements for maize at 100 kg per year. The surplus, estimated at the village level was 406 tons.

Bean harvesting

Beans were harvested in May/June, 2005, earlier than the maize. A mid season assessment showed that about 50% of the farmers did not plant beans, and those who did plant inter-cropped beans with maize. Due to heavy rains and a tall and thick stand of maize, the beans were shaded out and therefore did not perform well. The average estimated yield is one bag (90Kg) per acre, which was low compared to expected yield of 3-4 bags (or 270-360kg) per acre.

Cost of inputs, value of crop and repayment by farmers

The total value of the harvest (bagged) maize, calculated at \$20/bag of maize, was equivalent to \$212,400; this represents a return to investment three times that of the cost of the fertilizer and seeds (\$69,465). This does not include the costs and value of the labor inputs nor those of the beans planted and harvested.

Farmers had agreed to give 10% of the surplus from their harvest of long rains 2005, as payback for the inputs (fertilizer and maize seeds) they had received. This payback would be used towards the school meals program. About 7% of the farmers did not give any payback because they had large families and small farm sizes, and hence their surpluses were marginal, and some even had food shortfalls for the year. A total of 376 bags (90 kg each) of dry maize, equivalent to 33.8 tons were contributed as payback for the inputs. This represented 8.3% of the total bagged surplus, slightly under the 10% promised, and 3.5% of the total bagged maize upon harvest. The farmers also contributed beans for the school meals program as part of their payback, despite the poor harvest. A total of 4 and a quarter bags were contributed. Given that the inputs (fertilizer + improved maize seeds) cost was \$69,465.00, the payback was equivalent to \$7,690.00 (using government maize price of \$20 per bag, and \$40 for beans), representing a total subsidy after payback of 89%.

Maize storage and Cereal bank establishment

The Agriculture Committee decided to establish a Cereal Bank to solve the problem of price fluctuations and marketing of maize and avoid exploitation by middlemen who buy maize at a cheap price. They had visits to existing cereal banks, introduction and training

on opening and managing cereal banks by an NGO SACRED Africa. After the training of the Business and Agriculture committees by SACRED Africa, there was community mobilization in the Sauri to inform farmers of the opportunity to become members. Farmers are now registering with the Cereals bank under an interim committee (of seven members). Already 25 members are registered with the Sauri Cereal Bank, and a constitution has been written. The registration of members was completed by 31st March 2006, upon which elections of the Cereal Bank officials were held, with participation by all members of the bank. This would be followed by registering the group with the Ministry of Social Services and opening a commercial bank account and is yet to be done.

The time to establish a cereal bank is more than a year so the project came up with a system of providing an emergency micro-credit to buy the surplus maize farmers intended to sell from the 2005 harvest, store it and later sell it at a good price. A total of 281 bags were bought using this micro-credit scheme, and stored at the National Cereals and Produce Board (NCPB) stores in Yala Town. By using this method, the farmers would make a saving and get returns commensurate to the inputs and labor invested in production. Other farmers who could not sell out their maize using this system were encouraged to store their maize until a time when the market prices go up.

The maize contributed as pay-back by farmers was also stored at the NCPB stores in Yala Town. The Agriculture and Business committees that constitute the Cereal Bank interim committee dried, weighed and dusted the maize against weevils and stored it. Storage charges are quite nominal and affordable. The School feeding Committee would then source maize from this group as requested by the schools.

Improved Fallows for the short rains 2005

The Agriculture committee and farmers from the villages within Sauri sub-location 37 members of the agriculture committee were trained on the importance, use, and management of improved fallows. Seeds for the different types of fallows were distributed according to demand (Table 1).

The fallows were of three major categories:

- a) Green manure/ cover crop, which included; *Dolichos lablab*, *Mucuna pruriens* and *Canavalia* spp.
- b) Non-coppicing Fallows, which included; *Crotalaria paulina*, *Crotalaria grahamiana*, and *Tephrosia candida*.
- c) Coppicing Fallows; which included; *Calliandra calothyrsus*, *Gliricidia sepium*, *Leucaena Tricandra* and *Sesbania sesban*.

Quantities of improved fallow seed distributed to farmers are presented in Table 1.

Table 1. Improved fallow seeds distributed in Sauri towards the end of long rains

Improved fallow species	Total quantity distributed (kgs)	Remarks
<i>Calliandra calothyrsus</i>	7.6	Seed was enough
<i>Tephrosia candida</i>	245.7	Demand high
<i>Gliricidia sepium</i>	107.7	Adoption low
<i>Crotolaria paulina</i>	159.1	V. High demand
<i>Crotolaria grahamiana</i>	137.4	V. high demand
<i>Leucaena trichandra</i>	103.3	Response poor
<i>Sesbania sesban</i>	5.4	A lot growing wild
<i>Mucuna pruriens</i>	189.4	High demand
<i>Dolicos lablab</i>	13.8	Seeds not enough
<i>Canavalia spp</i>	12.5	Only one farmer.

Planting of improved fallows was completed by early July 2005. About 60% of the farmers planted fallows with Sauri B, Nyamminia A, Luero and Yala A villages recording the highest adoption (over 80%, for the four villages). Low adoption was noted in Nyamboga and Sauri A villages. Despite the campaign and trainings, about 10% of the community did not plant the improved fallows at all. *M. pruriens*, *C. paulina* and *T. candida* were the most widely requested.

This exercise was not without some challenges. These were:

- The short rains were characterized by a severe drought that caused death/stunted growth of the fallows.
- Late planting, where some farmers waited to harvest their maize crop to plant improved fallows, thus giving short time for the fallows to grow.
- There were a bit of reluctance by the farmers especially those of Nyamboga village since improved fallows were being introduced to them for the first time.
- The crotalarias were infested by caterpillars, especially in Sauri A, Nyamboga and parts of Madiri villages.
- A number of farmers did not follow the seed pre-treatment and spacing, especially for *Mucuna pruriens* and the coppicing fallow species.

With the challenges faced during the first year, judicious measures will put in place to ensure early planting, adequate supply of seeds, and refresher training of farmers, so that greater success can be achieved in the coming year (2006).

Crops for short rain 2005

The SR 2005 marked the first season for starting crop diversification. Agriculture extension services advocated for planting of short-term growing legumes, which, together with the improved fallows help in replenishing soil nitrogen fertility. Crops grown during SR 2005 were beans (farmers own seed), soybeans and groundnuts (provided to farmers). A total of 2000kg of groundnuts (Variety ICG12991) and 2000kg of soybeans (variety SB20) were distributed to the farmers at a rate of 2 kg per farmer enough to cover an area

of about 1/8 of an acre. These crops were grown with addition of a total of 10 tons of NPK fertilizer (sweepings) donated by YARA at the rate of about 8 gms per hole, enough for the soybeans and groundnuts. The Short Rains of 2005 was a bad season because of drought. Groundnuts were hardest hit because they normally take a longer time to germinate compared to soybeans. This resulted to very poor germination of groundnuts. With the nearly complete crop failure during the short rains, it was meaningless to collect harvest data. The total amount invested in the seeds and fertilizer US\$ 705, with little return on the investment.

Training courses

During this reporting period, a number of trainings were conducted, including; post harvest handling and storage, cereal banking, growing of indigenous vegetables, composting, soil and water conservation, and field visits. Table 2 gives a summary of the trainings done in agriculture over the reporting period.

Table 2. Trainings offered on agriculture, number of farmers attending and sources of facilitation

	Training subject	Women	Men	Facilitator(s)
1.	Post harvest handling and storage	17	27	MOA ¹ , SACRED Africa
2.	Cereal banks	20	23	SACRED Africa
	Fallows	16	21	MOA and Project Staff
3.	Indigenous vegetables	7	3	TDADT ²
4.	Composting	100	161	MOA
5.	Soil and water conservation	200	300+	MOA

¹Ministry of Agriculture

²Teso District-Akukuranut Development Trust

There were four events that the Agriculture committee took part in; (i) tour to Bungoma SACRED Africa, (ii) two visits to Bungoma and Teso, to learn about Maize Cereal Banking and storage and (iii) a visit to the Kisumu Agricultural Show

Post harvest handling and storage: training focused on; Harvesting techniques, preparation of storage facilities, storage pests and their control, drying process, dusting and fumigation - available dusts and how to handle them, storage, and causes and prevention of aflatoxin.

Cereal Banks: contents of the training course were; activities of SACRED Africa, - Charter design and management of a cereal bank, how to trade at a profit, safe preservation of maize/grains, maize marketing, and maize varieties and production.

Indigenous Vegetable training: this captured; value of traditional vegetables, production and utilization, processing, marketing of indigenous vegetables, and the preparation and use of manures such as compost.

Compost Making: Making compost manure is one of the strategies of recycling soil nutrients within the household and helps in improving soil health. In this training, farmers learned about; types of organic manures, advantages of compost fertilizers, components of compost (depending on sources of materials), measurement and digging of compost pits, materials used in composting, making compost layers and mixing, and removal and application of compost. Following trainings by agriculture extension staff at each of the 11 villages, farmers have been able to make 261 compost pits to date.

Soil and Water conservation: this training was conducted for three related departments, i.e. Agriculture, Water and Environment. The training course included; the concept of soil and water conservation, agriculture act, environment act, uses of water in agriculture, soil erosion - causes and effects, soil conservation structures (physical – terraces, and biological – unploughed strips, Napier strips etc), laying out of soil conservation structures (with practical), agroforestry, and river bank protection. After the training, a working committee was formed to help with laying out of the structures, in November 2005. Each village had a team of 3-6 members. To enhance the exercise, the project contributed one Line Level, a string and a spirit Level to each of the 11 villages.

A team of sixty six (66) members led the rest of the farmers in the villages in training exercises, where they have so far measured 91 farms (including those requiring maintenance). Up to the close of the year, 11 farmers had dug-up the structures (terraces).

January 2006-June 2006

The agricultural activities between January and June of 2006 have mainly entailed the preparation for the long rains, planting of maize using DAP and Urea (for top dressing), diversification in other enterprises and preparation for the establishment of the improved fallows. The farmers have tended the crops to make them realize good harvest.

Land Preparation

Land preparation was one of the activities that were carried out in the early part of the year. The preparation entailed cutting down the improved fallow trees and shrubs; clearing bushes, tilling the land and eventually harrowing. This was done with the aim of making the farms free from weeds and suitable for planting the maize crop which is predominantly grown in the long rains. The result from the land preparation instituted by farmers was a realization of germination in their farms that will result in a good harvest in the final analysis.

Input Distribution and Planting

As a strategy to improve the yields in Sauri Village, the project subsidized the much needed inputs with the help of the donors. The farm inputs are fertilizers and certified seeds. These inputs were meant to match the need for improved fertility of the land and improved quality maize seed that would do well in the agro-ecological zone where Sauri falls.

The Sauri community received a total of 800 of 50kg bags of DAP and 800 of 50kg bags of Urea (Table 3). Every farmer having one acre and above got 50kg of DAP per household and 50 kg of Urea, while those with less than one acre got according to their farm sizes. For every 50 kgs of DAP there was 10 kg of maize seeds WS502. However, as a measure of ensuring sustainability, the project in the second year reduced the amount of input subsidy given to the farmers.

Planting and Topdressing

Early and dry planting began at the beginning of March, when farmers applied DAP in their farms. Top dressing using Urea was done in mid April 2006. The quantities applied were 38.7 tons of both DAP and Urea (Table 3). The crop was almost reaching physiological maturity by the end of June 2006. However, crops in the fields are generally good and a bumper harvest is expected in Sauri at large. Beans performance was not quite impressive as a result of the heavy rains and about 40% of the total beans have been harvested.

Table 3. Distribution of fertilizer and maize seed per village in Sauri for long rains 2006

VILLAGE	DAP (50 Kg Bags)	UREA (50kg Bags)	MAIZE (kgs)	NPK (kgs)
Yala A	79	79	790	59
Yala B	38	34	340	29
Kosoro	56	56	560	40
Madiri	110	110	1100	84
Luero	75	70	700	45
Sauri A	55	55	550	43
Sauri B	114	114	1140	72
Nyamninia A	89	89	890	82
Nyamninia B	50	55	550	39
Silula	30	30	300	38
Nyamboga	82	82	820	59
Total	774	774	7740	590

Improved Fallow Planting

Planting of Improved Fallows this year improved in the wake of project purchasing the seeds from the farmers. Sale of improved fallow seeds therefore acted as a motivator to the farmers and planting rate has gone up from last year's 45% adoption to about 80% this year. Most of the farmers had their own seeds and whatever was subsidized was just to top up and also for those who never had any to plant. The improved fallow species distributed were: *Mucuna pruriens*, *Tephrosia candida*, *Crotalaria paulina*, *Crotalaria grahamiana* and *Crotalaria ochroleuca* (Table 4). It was not possible to get the seeds or seedling of the coppicing legume fallow species such as *Calliandra calothyrsus* and *Gliricidia sepium*, due the high demand. Planting started much early with some farmers doing it as early as the first week of May. About 80% of the seeds have been already

planted and germinated. The improved fallow shrubs are meant to boost soil fertility through nitrogen fixation and biomass transfer. These trees and shrubs also form the sustainability strategy for the project as the technology is cheaper and effective

Diversification and Producer Group Formation

Whereas the first year of the project saw the village focusing on food production for food security and surplus for some income, the focus for the second year is 'agriculture as a business' where the farmer has to produce not only surplus for income but also a diversity of crops and livestock enterprises for income generation and nutritional diversity. This was envisioned to be achieved through formation of Producer Groups, trainings and carrying out demonstrations.

The Producer Groups were formed through sensitization of the community on the various agricultural enterprises and they in turn registered with the groups they felt comfortable with. They gave preference to the first three enterprises i.e. Bananas, Tomatoes and Onions.

Table 4. Quantities of improved fallow seeds distributed per village in Sauri, in 2006

Village	<i>C. paulina</i> (kgs)	<i>C. grahamiana</i> (kgs)	<i>M.pruriens</i> (kgs)	<i>T.candida</i> (Kgs)
Sauri A	20	5	10	5
Sauri B	20	-	15	5
Yala A	20	-	15	5
Yala B	20	5	10	5
Luero	20	5	10	5
Madiri	20	-	15	5
Silula	20	-	15	5
Kosoro	20	5	10	5
Nyamboga	20	5	10	5
Nyamninia A	20	5	10	5
Nyamninia B	20	-	15	5
Total	220	30	135	55

Producer Group Trainings

Each of the three groups was trained in line with the enterprise chosen.

Banana Producer Group

Prior to training, a tour to Vihiga, Bungoma and Kakamega districts was organized for 12 members representing all the 11 villages and Agriculture committee chairman. This was to serve as an exposure for the members of the enterprise to learn how banana growing is done elsewhere in the neighboring districts.

Training was conducted and a total of 387 farmers were equipped with the necessary skills in banana husbandry. The attendance was impressive considering both men and women were adequately represented (Table 5).

Table 5. Attendance during training of farmers in the banana enterprise

Villages	Male	Female	Total Trained
Yala A, B & Kosoro	24	44	68
Nyamninia A, B, Silula & Nyamboga	62	130	192
Luero, Madiri, Sauri A & B	51	76	127
Total	137	250	387

In order to give the farmers a head start, a total of 707 tissue culture banana plantlets were procured by the project from both Kakamega KARI Research Station and from farmers in Kakamega district who are having nurseries for raising and bulking of the same. This was distributed to farmers in Sauri.. Each of the farmers got 2 plantlets. The condition for getting the plantlets was that the planting holes had to be ready. These would act as seed or bulking materials to enable the farmers expand their production within the next two years.

Onion Producer Group

After formation of the producer groups, training was carried out on husbandry practices and land preparation. The total number of participants/farmers trained was 159 on onions spreading throughout the sub-location out of which 99 were female and 60 male including the youth. The members of this producer groups are able to manage their plants successfully. The trainings were conducted/facilitated by the Ministry of Agriculture staff.

Farmers then agreed with the project that they be provided with seedlings and they in turn buy any chemicals needed for spraying and any other input needed for production of onions.

Due to poor timing of nursery establishment in the village, outsourcing of the seedlings was necessary. This guaranteed planting in good time. As a result, total of 98,000 seedlings were procured from Kitale district and distributed to the members from each village. Each of the members was given 500 seedlings as a start off. The harvest from the onion enterprise is expected in a few months time.

Tomato Producer Group

Identification of Tomato farmers was the first step after which a joint training carried out for both practicing and anticipating tomato farmers. A total of 58 farmers were trained and expressed interest in producing the crop having acquired the relevant skills. At the end of training facilitated by the government officers, it was agreed the members of the tomato producer group would purchase their own seeds, establish and tend the nurseries while the project would subsidize the production by providing the chemicals for spraying pests and diseases. The members of Tomato producer group have transplanted from the nursery 20,000 seedlings and 50% of these seedlings are in 3 villages of Yala A, B and Kosoro.



Dairy Producer Group

The main aim of coming up with the dairy enterprise is to enable the members of the group to increase their nutritional diversity and incomes. This also will go along way in diversifying the income base which for long has been tied to maize production.

The dairy producer group works closely with Heifer International for support in both capacity building and provision of heifers among the various groups that operate under dairy producer group. This coordination for the formation of this particular producer group was facilitated by the Agriculture facilitator, divisional livestock extension officer, and Agribusiness development officer. Actual activities in dairy production are expected to start between September and December 2006.

Sale of Maize by Cereal Bank Group

The cereals bank group (a combination of agriculture and business committee members) sold 284 bags of maize at an average price of Ksh 1,500 or approximately US \$ 20.83 per 90 kg bag. The total sales amounted to KSh. 419,300 or US \$ 5736. The maize had purchased from the farmers at Ksh. 1200 per bag during 2005 harvesting period. The total amount used by the cereal bank to purchase the maize from farmers in the previous year was Ksh 340,800 or US \$4662.10. This presented a net profit of Ksh. 78,070 or US \$ 1068. This bonus has been shared by the members who contributed but on the basis of the number of bags sold to the cereal bank. The storage and handling costs of the grains have been remitted by the project to the National Cereals and Produce Board that stored the maize. The Agriculture Facilitator, Community Facilitator and Program Assistant and the Enterprise Coordinator have been facilitating the transactions.

Monitoring of the improved fallows

Follow up of improved fallows has been necessary to ensure the seeds were planted in a timely manner and that the correct tending practices are administered by the farmers. The improved fallows definitely will result to improved fertility.

Aquaculture

A feasibility study for aquaculture potential of 20 proposed sites was done and 6 of the sites recommended as viable. The aquaculture is a food security initiative and will be supplementing the income for the local people involved in the process. At the same time a feasibility study for irrigation has been done in close collaboration with ministry of water. The reports have established the irrigation potential of nine water springs situated in Sauri.

HEALTH

July 2005-December 2005

Essential Healthcare Provision

The Sauri Community Dispensary opened in July 2005 and is staffed by: 1 Kenya Registered community Health Nurse, 1 Clinical Officer, 2 Enrolled Community Health Nurse, 1 Laboratory Technologist, 6 Community Health workers, 5 guards (1 day and 4 night guards). Out of these staff, the Clinical Officer and one Enrolled Nurse are Ministry of Health (MOH) staff. One dispensary kit of drugs was received from MOH in the month of August last year. From July through December a total of 11,818 patients came to the dispensary for Medical care. Sauri residents were 6738 and Non Sauri residents were 5080 (Table 6). The Non Sauri patients represented 43% of the total population attended to at the clinic over the last six months of last year.

Table 6. Monthly attendances in clinic July through December 2005 by residence of patients

Month	Total number of patients	Sauri Residents	Non-Sauri residents
July	1321	845	476
Aug	2257	1514	743
Sept	3050	1879	1171
Oct.	1575	812	763
Nov	2009	963	1046
Dec	1606	725	881
Total	11818	6738	5080

As part of all round services at the dispensary, the pharmacy is stocked with an assortment of drugs. The drugs mainly purchased by the project with MOH contribution coming in occasionally. The drugs cost the project approximately US \$ 4167 every month.

Laboratory Tests done in the clinic

A number of laboratory tests are also carried out at the Sauri dispensary to help in diagnosing the diseases properly. The most common diseases diagnosed and treated were malaria, respiratory tract infections, skin conditions, intestinal worms and diarrhea (Table 7).



The tests carried out at the clinic include:

- Pregnancy tests
- Blood sugar
- Urinalysis
- Haemoglobin estimation
- Stool analysis for ova and cysts
- Blood smear for malaria
- Ante-Natal Care profile

Malaria Treatment

Patients are diagnosed with malaria by clinical symptoms. In cases where the diagnosis is not clear, blood smears are taken for laboratory diagnosis. Malaria patients are treated with the following drugs:

1. Combinations of Amodiaquine and Fansidar® (Sulphadoxine/Pyrimethamine) both syrup and tabs as it may be applicable.
2. Combinations of Dihydroartemisinin and Fansidar®, both syrup and tabs as it may be applicable.
3. Quinine tabs/ injection
4. Coartem(Artemether/Lumefantrine) tablets.

Table 8 shows the laboratory tests results for malaria in Sauri in the period between July and December 2005. Comparing the number of patients with possible clinical symptoms of malaria (column 2) with the number of these patients that actually test positive for malaria (columns 3 and 4) indicates that using laboratory analysis to confirm malaria drastically reduces the number of patients that would otherwise be treated. This is important for effective treatment of the disease but is also much more cost effective.

Table 7. The most commonly diagnosed and treated diseases with the corresponding cases handled at Bar Sauri Clinic for the period July-December 2005. (The malaria cases given below includes both clinical and laboratory diagnoses).

Month	Top 5 Diseases in order of numbers seen against the total for the month.				
	1	2	3	4	5
July					
August 2343	Respiratory Tract infections 822	Malaria 778	Intestinal worms 143	Diarrheal diseases 128	Skin conditions 107
Sept 1918	Malaria 530	Respiratory Tract infections 485	Intestinal worms 122	Skin conditions 121	Diarrheal diseases 74
Oct 1276	Malaria 545	Respiratory Tract infections 508	Skin conditions 157	Diarrheal diseases 72	Intestinal worms 62
Nov 1049	Malaria 788	Respiratory Tract infections 598	Skin conditions 89	Pneumonia 88	Diarrheal diseases 80
Dec 1583	Malaria 821	Respiratory Tract infections 553	Skin conditions 158	Diarrheal diseases 111	Intestinal worms 71

Table 8. Results of malaria testing for Sauri and Non Sauri residents

Month	Total number of patients tested monthly	Sauri +ve smear	Non sauri +ve smear
July	240	87	34
Aug	340	112	65
Sept	392	85	71
Oct.	146	25	28
Nov	-	-	-
Dec	53	5	4
Totals	1,171	314	202

Note that the month of November and December went without power at the clinic and consequently no blood slides for malaria smears were taken. Towards the end of December a light microscope mirror was purchased to cope with the problem.

Child and Maternal Health

A total of 353 children have been immunized since September 2005 and growth monitoring for the same number of children under five years has been carried out.

Table 9. Vaccines administered to children at Sauri dispensary

Vaccine	Immunizable disease
BCG	Tuberculosis
Pentavelent	Diphtheria, Pertusis, Tetanus, Haemophilus influenza, Hepatitis B
Measles	Measles
Polio	Polio

Provision of Ante Natal Care (ANC) and family planning services to expectant mothers had also taken off in Sauri in the last three months of the year. A total of 46 expectant mothers had been provided with the basic ANC services over the same period.

Trainings

Capacity building which has entailed training of 33 Community Health Workers on Primary Health Care concept, principles and practices. The training was conducted by 9 different facilitators from MOH and other government departments, 4 MVP staff and 1 NGO staff-Rotary Doctors for 60 hours within 10 days. Training of 2 nurses and one clinical officer at the clinic on integrated management of childhood illness (IMCI) protocol was carried out.

HIV/AIDS

Yala Sub District Hospital is the main referral point for Sauri residents who need comprehensive HIV/AIDS care. The Center for Disease Control and Prevention (CDC) supports the activities at the Yala Patient Support Centre. The following is in place:

- Identification of People Living With AIDS (PLWAs) done through sensitization
- Comprehensive Millennium Village HIV/AIDS strategy being put in place for 2006
- Mapping out PLWAs in which 25 people are on ART therapy in Sauri but only 12 (confirmed) of them are getting the medicine at Yala Sub District Hospital.
- Sauri residents have a choice of being attended to at Yala support centre
- Services offered include: VCT (supported by CDC), management of opportunistic infections, provision of ARVs and Prevention of Mother to Child Transmission (PMTCT)
- CDC is supporting and strengthening Patient Support Centre services at Yala in collaboration with the MOH

Stool Sampling for Intestinal Parasites

Stool sampling was carried out in Sauri in the last month of 2005 to determine baseline levels of intestinal parasite infection before the start of the deworming program in schools.

The survey started on 22 December 2005 and ended on 9 January 2006, taking just over 2 weeks. The sample size was divided into three (3) different age cohorts, each cohort representing 120 individuals as outlined below. These cohorts were 2-4 year olds, 9-10 year olds and women of reproductive age (15-49 year olds).

Analysis of the samples in the laboratory was done using the Kato Katz technique, and the following table (Table 10) present the summary results obtained.

Table 10. Prevalence of Soil Transmitted Helminthes (STH) among three age cohorts in Sauri Village

	2-4 years	9-10 years	15-49 years
Ascaris	38%	55%	29%
Trichuris	21%	52%	34%
Hookworm	23%	54%	65%
Infection with any STH	48%	80%	75%
Double infection	21%	35%	26%
Triple infection	6%	24%	13%

January 2006-June 2006

From January to June 2006, 22658 patients came to the dispensary for medical care (Table 11). This number is almost double the number of patients attended at the dispensary in the previous six months (11818), probably because of the change of weather from dry spell to rainy conditions (in March) comes with increased number of ailments. In addition, the awareness of the clinic services has increased and spread to areas outside of Sauri. Sauri residents attended at the dispensary totaled 14261, while those from outside of Sauri were 8397 (Table 11). The Non Sauri patients represented 37% of the total population attended to at the dispensary over the first six months of 2006.

Table 11. Monthly attendances in Sauri dispensary (by origin) from January to June 2006.

Month	Total number of patients	Sauri Residents	Non-Sauri residents.
January	2863	1943	920
February	2807	1890	917
March	3104	2054	1050
April	3142	2062	1080
May	4103	2720	1383
June	6639	3592	3047
Total	22658	14261	8397

The most common diseases diagnosed and treated at the clinic between January and June 2006 were malaria, respiratory tract infections, skin conditions, intestinal worms and diarrhea (Table 12), similar to the June – December 2005 period. Cases of pneumonia

were also prevalent in the first half of 2006 probably because of the cold during the rain season.

Malaria

Among the key activities that have been undertaken in the health sector in Sauri include laboratory diagnosis and treatment of malaria. The statistics of patients tested for malaria are presented in Table 13.

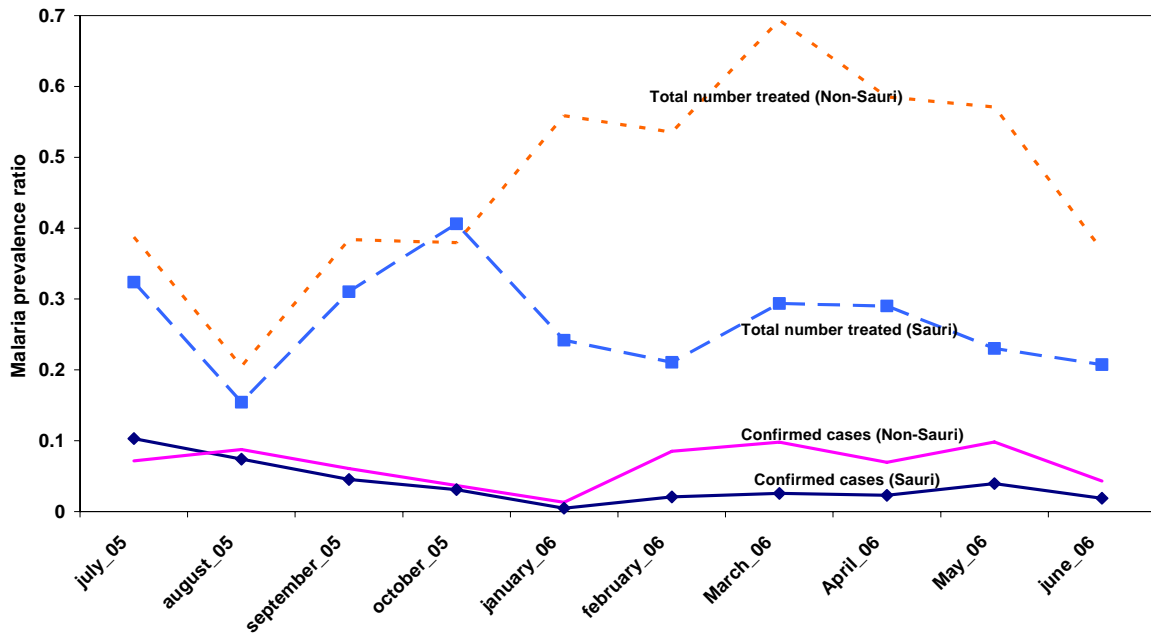
Table 12. The most commonly diagnosed and treated diseases with the corresponding cases handled at Bar Sauri clinic for the period Jan-June 2006. (The malaria cases given below includes both clinical and laboratory diagnoses).

Month	Top 5 Diseases in order of numbers seen against the total for the month				
	1	2	3	4	5
Jan 1944 patients	Malaria 984	Respiratory Tract infections 515	Skin conditions 187	Diarrhoeal diseases 158	Intestinal worms 115
Feb 1890 patients	Malaria 889	Respiratory Tract infections 528	Diarrhoeal diseases 157	Skin conditions 130	Intestinal worms 107
March 2254 patients	Malaria 1331	Respiratory Tract infections 696	Diarrhoeal diseases 233	Skin conditions 221	Eye infection 91
April 2061 patients	Malaria 1230	Respiratory Tract infections 763	Skin conditions 417	Diarrhoeal diseases 238	Pneumonia 126
May 2720 patients	Malaria 1416	Respiratory Tract infections 915	Skin conditions 431	Pneumonia 182	Intestinal worms 161
June 3592 Patients.	Malaria 1869	Respiratory Tract infections 857	Skin conditions 450	Pneumonia 185	Intestinal worms 178

Table 13. Results of patients tested for malaria at Bar Sauri health clinic, January - June 2006

Month	Total Number of patients tested for malaria	Sauri Residents	Non-Sauri residents.	Sauri +ve smear	Non Sauri +ve smear
Jan	87	42	45	8	12
Feb	377	170	207	39	78
March	472	218	254	53	103
April	395	194	201	47	75
May	718	323	395	107	107
June 26 th	479	191	288	67	131
Total	2528	1138	1390	321	506

Figure 4: Trends of malaria for both Sauri residents and Non Sauri residents from July 2005 to June 2006. Malaria prevalence was calculated as the ratio of those treated or testing positive for malaria test to the total number of patients seen at the dispensary from within and outside Sauri, respectively.



Long lasting insecticide treated bed nets (LLITNs) were distributed to the residents of Sauri in April/May of 2005. The information in Figure 4 compares the number of patients treated for malaria that came from within Sauri to those that came to the clinic from outside of Sauri. The comparison allows a means of looking at the effectiveness of the LLITNs, assuming that Sauri residents were using them and non-residents were not.

Six months after interventions with treated bednets and treatment of malaria were put in place in July 2005, there was no marked difference in malaria incidences among ‘inside’ and ‘outside’ of Sauri residents (Figure 4). However, the situation changed after six months, where malaria incidences among Sauri residents became three times lower (0.34 times on average) compared to non Sauri residents. There is therefore a positive effect of the interventions that have been put in place like long lasting treated nets and outreach mission initiated by the project. The period from February up to May is also visible as the malaria peak period and therefore needs a lot of preparedness for prevention and curative services. In the treatment of malaria, the patients have been treated using drugs such as:

- Coartem tabs-Artemisinin based Combination Therapy-ACT.
- Oral, intravenous, and intramuscular Quinine
- Tabs/syrup Amodiaquine.

Environmental management such as clearing mosquito breeding sites around the compounds of most of the houses has been started and the process is continuing. Otherwise Indoor Residual Spraying is planned to take place later as the next step in malaria prevention and control. This will take place after repeat of blood sampling to evaluate the malarial situation after one year of intervention.

Child and Maternal Health

Immunization is one of the preventive measures taken to avert potential diseases that could otherwise attack the children in future. A total of 675 children have been immunized since January-June 2006 and growth monitoring for the under 5 five years. Table 14 shows that both pentavalent and polio vaccines have recorded the highest usage in the six month period. The implication for planning is that the access to these vaccines should be enhanced or maintained.

Table 14. Number of children (birth months to 9 months) that were vaccinated during the first half of the year

	BCG	Pentavalent	Measles	Polio	Total
January	23	44	12	28	107
February	8	51	30	19	108
March	15	54	15	55	139
April	19	39	12	7	77
May	18	24	5	39	86
June	13	63	21	61	158
Total	96	275	95	209	675

75 % of the children presented for growth monitoring were repetitions in the succeeding months while the other percentage were the new cases appearing in each of the six months under consideration in the report. Underweight children were 4% of all those weighed, with other adverse conditions being less than 0.5% (Table 15).

Table 15. Growth monitoring results for the first half of the year for children under five years of age

Month	Total Weighed	Under Weight	Kwashiorkor Cases	Marasmus Cases	Others (Anemia, Vit. A Def., Pellagra)	Constant Weight 3months Or Faltering Growth
JAN	529	13	1	2	1	1
FEB.	525	9	0	1	2	0
MARCH	627	19	1	1	2	1
APRIL	700	31	2	1	4	0
MAY	872	44	2	2	5	0
JUNE	889	48	0	0	2	0
TOTAL	4142	164	6	7	16	2

Provision of Ante Natal Care (ANC) and family planning services to expectant mothers has entailed the following tests:

- Haemoglobin (HB)
- Blood slide examination for Malaria parasites
- Blood grouping and Rhesus factor
- Stool analysis for ova and cysts
- Urinalysis

The number of mothers attended for antenatal care and family planning are presented in Table 16.

Table 16. Cases attended to in the Sauri clinic for January 2006-June 2006

Month	Ante Natal Care cases	Family Planning cases
January	16	29
February	16	29
March	39	45
April	36	32
May	49	27
June	44	36
Total	200	198

HIV/AIDS

Yala Sub-District Hospital is the main referral point for Sauri residents who need comprehensive HIV/AIDS care. The CDC supports the activities at Yala Patient Support Centre. The support of CDC includes assistance in CD4 counts after the blood samples have been collected from patients at the sub-district hospital. Otherwise the following has been put in place during the reporting period:

- Identification of 130 People Living With AIDS (PLWAs) in Sauri was done through sensitization
- A comprehensive strategy being put in place for 2006 is yet to take off because of limited physical structures at the clinic. In addition, a nutritionist and a clinician with training in anti-retroviral therapy are yet to be brought on board.
- That being said, the community outreach component of the strategy has already begun. 8 out of the existing 33 Community Health Workers (CHWs) have been trained in Home Based Care by Pathfinder and Mild May International through MoH.
- Mapping out PLWAs in which 60 people are on ART (Anti-Retroviral Therapy) in Sauri but only 12 (confirmed) of them are getting the medicine at Yala Sub District Hospital.
- Out of 60 PLWAs (People Living with AIDS) on ART, 30 have already expressed willingness to participate in nutrition supplementation programme and the consent forms have been given to them through the CHWs for signing.
- Sauri residents have a choice of being attended to at Yala support centre or any other service outlet of their ability and preference.

CDC is supporting and strengthening Patient Support Centre services at Yala in collaboration with the Ministry of Health (MOH). At Yala Sub district hospital, VCT (supported by CDC), management of opportunistic infection, PMTCT services and provision of ARVs are among the key services offered.

The process of recruiting a Clinical Officer and Nurse Counselor with HIV care experience to train and mentor other healthcare workers at the Sauri dispensary and other surrounding health facilities was started in June. The objective is to provide testing for HIV at these facilities, register infected persons, and eventually acquire antiretroviral drugs when adequate numbers are registered and in care.

Deworming

After executing the stool survey to determine the prevalence of intestinal parasites, it was found that 48% of 2-4 year olds, 80% of 9-10 year olds, and 75% of 15-49 year old women have either *Ascaris lumbricoides* *Trichuris trichiura*, or hookworms. Consequently de-worming exercise was carried out in which more than 2000 children between the ages of 1 and 15years benefited. The deworming exercise was carried out in the Sauri village and the village was blocked into four areas. Those in the ages between 2-15 years were treated at Bar Turo Primary school, Bar Sauri, Nyaminia school and Yala ACK in Sauri. The treatment was done using albendazole tablets.

Those participating in the exercise were 2 laboratory technologists, 1 medical records technician, and 33 community health workers. The drugs were purchased by the clinic

and transported to the sites at the beginning of every day. The CHWs were handy in mobilizing the clients to come for the treatment, organizing queues, tallying the clients as per the village and assist in crushing the tablets for young children.

Training

The Ministry of Health regulation stipulates that a facility like Sauri that has been gazetted (registered as a government institution), a health management team has to be incorporated to oversee its operations. The team of 13 (11 men and 2 women) people that had been selected by the Sauri community on the basis of criteria set by the ministry of health had its capacity improved to equal the task ahead. It was expected that on completion of the training the committee will have adequate background knowledge to steer health issues at the community. The objectives of the training seminar were to:

- Understand and interrelate the various activities within MVP.
- Appreciate Primary Health Care/Community Based Health Care concept in health care delivery.
- Know and understand the linkages between the community and available health structures.
- Understand the roles of committee members and other players in PHC/CBHC services.
- Acquire knowledge on proposal writing and resource management.
- Acquire knowledge and skills on conflict resolution and decision-making.

Health management Committee members were trained on Principles and practices of health management at the community level. The training was facilitated by Ministry of Health and Millennium Village Project staffs and lasted five days.

Training for Indoor Residual Spraying (IRS) was done for 22 (19 women and 3 men) Community Health Workers. The CHWs were trained in techniques of IRS for 2 days that involved one day of theoretical content and one day of practical demonstration and return demonstration of the skills in randomly selected households. The training was conducted by facilitators from Ministry of Health.

Training of 1 Sauri clinic nurse and as a facilitator cum supervisor for integrated management of childhood illness (IMCI) protocol was undertaken during the reporting period. The training was conducted by WHO country office in collaboration with Ministry of Health and the training took 5 days. The skills acquired following this training have been useful in treating children in Sauri dispensary.

Eleven CHWs (2 males and 9 females) were trained on sanitation and hygiene a workshop organized by Sanitation sub sector are now able to assess the latrine needs at the community and assist households come up with appropriate latrines for household use.

Installation of solar power back-up at the clinic by Chloride Exide Company under the watch of 2 women and 8 men from the Sauri community has been one of the greatest milestones in the development of the health clinic.

WATER AND SANITATION

July 2005-December 2005

The water sector activities during the six-month period covers spring protection, rain water harvesting, piped water, hygiene and sanitation, and water quality measurements.

Spring protection

The entire Sauri Water Supply and Sanitation (WS&S) Committee (33 members) received training on the concepts and principles of spring development in June/July 2005. This included basic groundwater hydrology, protection of catchments, spring protection works, and maintenance of these protective structures.



The WS&S Committee provided a list of 27 springs which they viewed as needing either to be protected (if unprotected) or repaired. The characteristics of these 27 springs were assessed for adequate drainage, flow rates, and location (both in relation to population density and proximity to other water sources) resulting in a short-list of 15 priority springs. Practical application of the training entailed spring construction and repair in these priority springs. From October through December 6-8 WS&S Committee members worked with 2-4 non-committee community members in each of the areas in the spring protection work. The project contributed \$4006 for material and technical labor expenses (\$2,873 – materials and \$1,133 – technical labor) for these 15 springs. Community cost-sharing included non-technical labor, provision of hardcore stones (up to 14 tons at a single spring), and lunch for onsite volunteer workers. The community contributed \$967 worth of materials and 480 person-hours (see details in the section on cost-sharing).

Rainwater harvesting

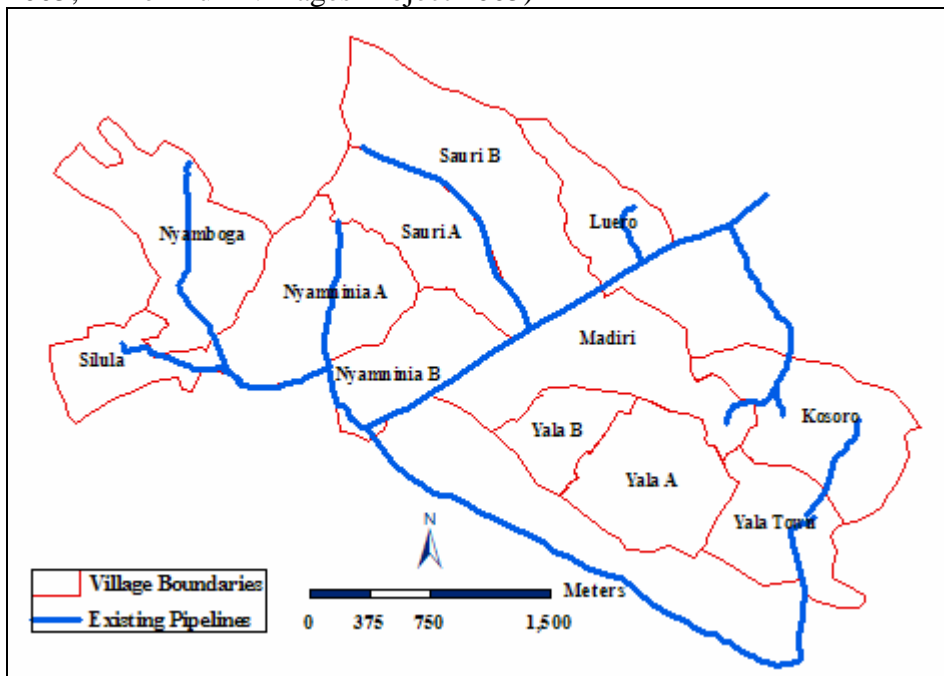
Fifteen members of the WS&S Committee participated in a 3-day rainwater harvesting (RWH) tour in which they visited successful roof- and ground-based RWH projects for home consumption as well as water for improved food security through small-scale irrigation. The tour was sponsored by RELMA (Regional Land Management unit at ICRAF, Nairobi). The committee received a combined theoretical and practical training workshop on RWH construction in July/August where 7 roof-based systems were constructed. Fifteen members participated in the construction of these systems which included metal gutter collection with storage in 5 cubic meter ferro-cement tanks. Expenses on materials, transportation, and technical labor totaled \$6,900 (\$2,050 – materials, \$1,050 – transportation, and \$3,800 – technical labor). Community cost-sharing included non-technical labor, provision of hardcore stones (up to 0.5 ton at a single site), and lunch for onsite volunteer workers. The community contributed \$330 worth of materials and 640 person-hours. Additional RWH training is planned through

the Irrigation Department of the Ministry of Water where the committee will use roof-based RWH training for rehabilitation of primary school systems and constructing ground-based RWH with pond storage for use in small-scale agriculture.

Piped water

Parts of Sauri village are connected to the Malanga-Sidindi Water Scheme coming from the Yala River. This scheme had not been providing water to Sauri until the project began discussions with the district water officials. The WS&S Committee together with MV project staff and the Lake Victoria South Water Services Board (LVSWSB) technicians mapped all preexisting waterlines within Sauri (Figure 5). From these data, the committee together with project WS&S staff and LVSWSB technicians has proposed pipeline extensions which will require a detailed engineering survey and budget. A proposal to use LVSWSB development funds for these extensions was submitted by the WS&S committee.

Figure 5. Piped water lines for Sauri Millennium Research Village. (From Kaluzny 2005; Millennium Villages Project 2005)



Hygiene/Sanitation

Fifteen members from each of the WS&S and Health committees received training on Safe Water Systems. This training was conducted by Safe Water and AIDS (Rotary). The training comprised three main foci: point-of-use water treatment (e.g. Water guard, Pur), safe water storage in modified ceramic containers with taps, and good hygiene practices.

Water Quality

The water quality of the protected springs has been assessed and found to meet WHO standards for inorganic elements (the biological tests are still being conducted). These studies were done by a graduate student from Moi University who is carrying out her research in water quality. The water committee is in a position of doing some monitoring and checking the flow rates of their own springs.

January 2006-December 2006

The project stepped up its effort in improving the status of the sanitation with a rigorous training on the importance of having proper waste disposal. Theatre for development has been the key methodology in the trainings as it is a powerful tool for social change. The project and the community have managed to improve the access to water by up to about 60% through the construction and rehabilitation of 15 water springs and revival of the main water pipeline that had stalled initially. The project is working with the government to supply a borehole and improve water and sanitation needs at Yala Sub-District Hospital

Assessment of water system at Yala Sub District Hospital has been conducted and borehole site identified in the hospital. This will assist in having a reliable water supply for the hospital that serves the entire Yala division and the neighboring division. The water supply situation at the hospital currently is wanting and so the project is teaming up with the government to have the water system work, in addition to setting up the borehole, plumbing needs have been ascertained and presented for acquisition. Plumbers have also been identified to complete the plumbing works that had stalled.

Buffer Spring Protection

Spring conservation was also undertaken to ensure an all year round supply to the Sauri community. Indigenous trees were planted at Kopolo, Koyundi, Korony, Kadede and Konyalo springs. The trees included *Moringa oleifera*, *Albizia* spp, and *Prunus africanum*. This planting was carried out by 80 females and 52 males. The buffer planting at the springs has included in its design the planting of grass on the inner layer, then Napier grass in the middle and finally on the outer circle, indigenous trees and shrubs were planted. About 2500 seedlings have been planted at the springs.

In the month of April alone, 6 springs were planted with trees to protect them from damage by erosion and animals. This was done in liaison with the environment committee. The environment committee members and a few of the water committee members planted a total of 1200 seedlings of different species. The environment committee contributed labor and 265 seedlings while the rest (935) were contributed by the Forest Department- Yala Division.

Spring discharge monitoring has been undertaken by the community members themselves to establish the variation in water supply over time. Seven women and three men in the community have been participating in discharge monitoring exercise. The preliminary

results have been steady supply of water in most of the protected springs. More sampling will be needed to give concrete results by the end of the year.

Water harvesting

Assessment for roof water harvesting was done in 3 schools of Bar Sauri, Nyamninia and the Churches for 3 days by the water committee. The assessment is meant for planning purposes such that the requirement for the institutional water tanks is established.

Latrines

A pit latrine for girls was constructed at Bar Sauri primary school, the project and the parents have teamed up to have the facility in place. The parents' contribution in putting up the facility was 20% of the total cost incurred. The result has been improved hygiene, privacy and safety in the school.

Training: Theatre for Development

Misango Arts Ensemble has been training on theatre for development focusing on water and sanitation. The attendance has been impressive with 22 females and 20 males taking part. The aim of the training is to enable the community to acquire skills that will consequently help them change sanitation behavior. There is an important outcome in terms of Education Information and Communication materials that have been developed. A drama group has also evolved that have acquired the necessary skills to enable them do social transformation in the village in nearly all the facets of developments that have been introduced by the Millennium Villages Project.

INFRASTRUCTURE (ROADS, COMMUNICATION AND ENERGY)

July 2005-December 2005

Roads

This department (committee) has had few activities over July – December 2005 period. More community mobilization is required to ensure that all are involved in providing labor to improve the roads in the community. The roads are meant to spur development by enhancing access to markets for the agricultural produce and also serve to improve the welfare of the community in reaching hospital in cases of emergencies.

A village vehicle was purchased and modified according to specifications to serve as an ambulance and marketing vehicle. The vehicle By-Laws were developed by the Transport Subcommittee of the Executive Committee and have been sanctioned by the committee members. The by-laws specify the objectives, the authority to issue travel order, cost sharing, the rates to be charged, and even the maintenance of the vehicle.



The vehicle will be handed over to the community once they have developed a satisfactory management plan.

Communication

The Sauri Media Times is an initiative from the youth in the community to build an information system both within Sauri and externally. The main aim of this group is to keep Sauri community informed/updated about occurrences in and around Sauri. Sauri Media Times was borne out of a business committee training offered by Grace Okello as illustrated under the business section of this report. In addition to being a community information system, this initiative will also serve to engage the youths meaningfully and generate some income for the group members. These objectives will be attained by putting up notice boards at strategic places within the community, disseminating information in community Barazas/gatherings as well as publication of magazines. The group is expected to work jointly with the existing community structures such as the executive committee to achieve its goals in a harmonious way.

Energy

This sector has also been a buzz with a number of activities in the recent past, including the construction of energy kiosk, a 16 x 12 ft corrugated iron sheet structure that will enable the community to charge their electric lantern batteries and mobile phones within easy reach at nominal rates.

A set of 3.75 KVA generators was bought and installed at Sauri Clinic. The generator, however, was not able to supply the much needed power at the clinic as anticipated. The generator could only be used for backup in case of power failure.

The Ministry of Energy through KPLC committed to install electric grid to the Sauri clinic, Sauri center and Bar Sauri Primary School. Thus far the grid poles have been erected, electrical cables strung and transformers delivered.

Three institutional cook stoves were installed at the Bar Sauri Primary school. The stoves were designed to facilitate making meals economically in the school thus saving on time and wood fuel while ensuring all pupils have enough to eat during school. Improved household cook stoves were installed at selected households. These stoves, locally referred to as “upesi (quick) jikos,” are molded by clay and are less smoky and more efficient in time and fuelwood compared to the traditional three-stone earthen fires. Efficiency tests held in villages for the installed cook stoves together with community members demonstrated the advantages of the “upesi jikos” over the traditional three-stone earthen fires.

A Market Survey was fielded to assess the average expenses incurred by community members in their daily household energy needs. From this survey options of the appropriate interventions could be made.

Training on infrastructure

Trainings were held and agreements about road improvements were made with transport, roads and communication committees. A total of 44 community members were trained and made aware of their roles and responsibilities in roads maintenance.

The committees together with two representatives from each and every committee were trained on concepts of Community Service Order (C.S.O) in Kenya and how to work with those people on probation.

The roads and communication group also visited a community phone (simu ya jamii) vendors at Yala to learn more on how to start and manage the phone.

The energy committee has been trained on Community Action Plan development and biogas development and use.

January 2006-June 2006

Roads and communication

Procurement and installation of VSAT has provided an internet connection at Yala field office serves no less than 15 people in a day including Millennium Village Project staff. This has greatly improved communication between the main office in Kisumu and even with other team members outside Kenya. Reports, plans and important issues are now easily communicated. The facility is however, not being used by community members but hopefully they will soon be able to access the service from their villages.

The activities and the subsequent outputs in this sector have included the identification, classification, and mapping of 12 existing access roads and one main road. Bush clearing and size demarcation was carried out for 12 roads. This process has been supported by the community members where 15 members of whom 4 were women participated. Bush clearing ranks high as the activity is done with much participation from community members (25 men and 15 women). Some of the roads where the bush clearing and labor based improvement has been carried out are in Yala A, B and Madiri villages. The Ministry of Roads and Public Works carried out mechanized grading of Road no. 1 (from Nyamninia tarmac junction to Anyiko through Sauri).



Procurement of implements to carry out road works, in which mattocks, axes, hand hoes, machetes, slashers, spade, rakes, files, hammers, tape measures were purchased at the beginning of the year. The main aim of purchasing the equipments and tools was to have reliable implements that would be handy in doing the labor based works on the roads.

The community pay phone has been acquired and operational. The phone has been sited at the clinic. Because of the large number of people passing through the area on a daily basis, this has presented a market for opportunities for business initiatives at the Sauri centre. Approximately eighteen people use the service on a daily basis. The cost of calling from the community phone per minute is USD 0.33. This has now benefited the community through improved access to communication in Sauri village. At the same time the roads committee running the facility generates some income which will be used to cater for the running costs and purchase an additional phone in future.

Energy

Energy-related activities between January and June of 2006 were carried out in conjunction with community and assistance from other stakeholders like the government.

The institutional cook stoves that were installed in 2005 reduce energy consumption by more than a half. The overall implication is reduced cost for the school management on money spent on the purchase of wood fuel.

Ten 'upesi' cook stoves were procured by the project and installed in the village for demonstration and promotion purposes. The households for demonstration were selected

by the committee members themselves and the points were distributed evenly in Sauri village. The attendance during the demonstrations was fairly impressive with a total of 24 out of 33 energy committee members attending the exercise. The women who attended the occasion were 10. The demonstrations held in the villages focused mainly on the efficiency tests. This was able to illustrate the difference between the commonly used three-stone stoves and the improved ones.

The revival of *Kawiti* Women Group (former local producers of *Upesi* cook stoves with the efforts of GTZ and Bukura Agriculture Institute has been a key development in the energy sector. The community is expected to purchase the improved stoves which have been moulded by the group. This group had been dormant for a while but through linkages with other institutions aforementioned, it has been possible for them to be on their feet again. The group has been able to produce an average of about 100 stoves per month. This is set to improve the income base of the group members.

The installation of power grid is at an advanced stage: The transformer has been installed paving way for the electrical installations to continue at Bar Sauri School, health clinic and the community learning and resource centre and the energy kiosk. The main challenges that brought about the delay were lack of low voltage materials that were to be imported by Kenya Power and Lighting Company from South Africa and also the government of Kenya bureaucracy that was needed to have the process moving on.

A pilot test of the lanterns in which students in the schools have been involved has been on course. The exercise has been taking place in the three schools which are in the entire Sauri village that is Bar Sauri, Bar Turo and Nyamninia primary schools. Fifteen lanterns are being used in this exercise. Apart from the students involved, 8 ladies and 7 men have greatly assisted in the testing of the lanterns. The main objective of having the lanterns tested is to have optimum lighting in the house to enable the pupils do their home work in the evening during their preparatory studies.

EDUCATION

July 2005-December 2005

Overview

In Sauri several activities are directed toward the education MDG including sponsorship for bright and needy students, establishment of community learning and resource centre, a school meal program and capacity building program. Most of these activities were spearheaded by the education committee with the participation of the MV Project and the wider community.

Based on the principles of three way partnerships, the education committee together with relevant partners has managed to establish a community learning resource center with furniture and books relevant for community development. The center is called Sauri Community Learning Resource Center situated at the center of the village. The Ministry

of Adult Education and Ugunja Learning Resource Center trained the community on how to manage the center and went ahead to attach one adult education teacher and has also provided books for the center. Currently they help other sectors with information as the books are catering for all departments. The community is planning to develop this center to offer comprehensive information center equipped with enough books, traditional information and internet facilities. The adult education teacher and the committee are in the process of establishing adult education center at the community centers like churches, schools and other community places to improve the community's literacy level.

The Education Committee also constructed four classrooms at Nyamninia and one classroom at Bar Turo primary schools. The classes at Nyamninia are being put up by the community and the Community Development Trust Fund a local development partner. Through cost sharing between parents and the MV Project, a fence and gate were erected at Bar-Turo school, The contribution from the parents included the poles, unskilled labour, and paying the skilled labour. The MV Project provided cement and barbed wire. In addition to these activities, the committee developed and printed an architectural plan with bills of quantities for the proposed youth polytechnic.



School feeding program

The school feeding program aims at improving the nutrition of the pupils as well as enhancing their performance. There were interventions to enhance the existing program at Bar Sauri Primary School. Previously, the school used to feed about 150 students especially those of higher grades. Since the month of September 2005, the feeding programme was expanded with the help of the MV Project to include all the students of

the school (500 in number). The meal consisted of maize and beans with additional ingredients including oil, salt, onions, tomatoes and fruits (twice a week).

In preparation to expand the school feeding to the other 2 schools within Sauri (Nyaminia and Bar Turo primary schools), the following activities were done:

- Carrying out on job training for the 14 school feeding sub-committee. The committee members gained knowledge and skills on costing and purchasing of various food stuffs applying the supply/demand principles.
- Balanced diet options were provided by a nutritionist for evaluation based on locally produced foods while providing necessary nutrition components.
- The school feeding committee worked out detailed school feeding options and budget. They were also able to come up with a detailed annual plan for the school feeding program.
- There was extensive sharing with the parents of the 3 schools on the feeding options and their inbuilt contributions in the operational feeding program. Head teachers were given the responsibility of ensuring that the parents fulfill their pledges.

Out of the 5 options suggested, 2 were selected because of availability and cost of foods. These included a menu for (i) three days of the week with maize, beans, fat, vegetables and fruit (twice a week), and (ii) two days of the week with ugali (cooked maize floor), fish/meat, vegetables and fat.

Parents agreed to provide $\frac{3}{4}$ of the maize, and $\frac{2}{3}$ of the beans requirements for the school meals programme. The rest of the ingredients would be provided by the MV Project.

In order to feed the 1,600 students in the three schools, based on actual costing of food items it was calculated that the total cost of meals is \$32 per child per year. From the cost sharing of the costs between the MV Project and the community, they contribute \$6.1 and \$2.8 per Sauri resident, respectively in a year (Table 17).

Table 17. Cost of school meals and contributions from project and community per year.

Contributions	Ksh	USD (\$)*	Proportion of cost	Per capita cost (\$) in village	Type of contribution
Project	2,204,893	30,624	0.60	6.1	Cash for buying food
Parents	432,000	6,000	0.28	2.8	18 kg maize per child
Parents	576,000	8,000			12 kg beans per child
Harvest Contributions	444,000	6,167	0.12	1.2	370 – 90kg bags [#]
Totals	3,656,893	50,790		10.1	

*1 USD = 72 Ksh

[#]one 90 kg bag = Ksh 1,200/=

Trainings in education

In early August the Education committee was trained together with two representatives from each and every committee village elders and teachers on community mobilization leadership, involvement and community participation. Thereafter, an exchange visit was organized to Ndere Youth Polytechnic in which they learnt how to start and manage a youth polytechnic. Other trainings have also revolved around proposal development, design and development of school feeding menu.

January 2006-June 2006

This sector had a number of activities which have been undertaken thereby resulting to certain outputs. These activities include:

In the sponsorship programme, 5 additional students have been supported by the project this year. However, many students have performed well this year prompting other donors like YARA East Africa to assist additional five students. This has resulted in hard work by the students who aspire to get the scholarships since they come from poor households. A data base for students under sponsorship for secondary education has been developed. The details include the status of their parents, the villages they come from, the primary schools attended and the present secondary schools where they are placed.

Table 18. Breakdown of students under the scholarship/bursary program

No.	Class/Form and year of entry to form ONE	Former Primary	Present Secondary	Project/Sponsor
1.	1-2006	Bar-Sauri	Ng'iya Girls	MVP
2.	1-2006	Bar-Sauri	Sawagongo Boys	MVP
3.	1-2006	Bar-Sauri	Asumbi Girls	MVP
4.	1-2006	Bar-Sauri	Kanga Boys	MVP
5.	1-2006	Muhanda	Ambira Boys	MVP
6.	1-2006	Bar-Sauri	Ng'iya Girls	YARA EA
7.	1-2006	Bar-Sauri	Nyaka Girls	YARA EA
8.	1-2006	Bar-Sauri	Sawagongo	YARA EA
9.	1-2006	Bar-Sauri	Sawagongo	YARA EA
10.	1-2006	Bar-Sauri	Sawagongo	YARA EA
11.	2-2005	Bar-Sauri	Maranda Boys	MVP
12.	2-2005	Bar-Sauri	Ng'iya Girls	MVP
13.	2-2005	Bar-Sauri	Maranda Boys	MVP
14.	2-2005	Bar-Sauri	Ng'iya Girls	MVP
15.	2-2005	Bar-Sauri	Sawagongo Boys	MVP

Education Committee has been sensitized on linkage with village polytechnics that are available in the neighboring cluster villages through meetings. The option of improving and using the available seems to be the best alternative.

The community learning and resource centre has been developed and operations runs intermittently as the regulations and modalities are being put in place. The regulation will spell out management issues. The education committee has also made linkages with Ugunja Community Learning Resource Centre which has done some training to the committee on the functions of CLRC and the same institution has promised to give one or two computers to the Sauri CLRC. This partnership has led to collaboration and closer working relationship. This education committee through exchange visits and trainings are more empowered and skilled. Executive Committee has identified a piece of land which they have planned to put a community centre through fundraising. The fundraising was organized and held in the month of June. The fundraising realized about US \$. 957.59 and plans are afoot to mobilize another fundraising.

At the same time, tools for adult literacy survey have been developed for use in identification of potential members for the adult classes in close collaboration with the Adult Education Department. The education committee also selected one member of the Sauri community to attend a computer training course. Nelson Shisia was nominated to pursue the course and then eventually he could have the opportunity to train other members of the community on the acquired skills.

Training of Education Committee

A two days training and sharing seminar was organized jointly by the project and community so that they could be equipped with skills and knowledge on how to establish and managed a community learning resource centre. The attendance was fairly impressive with 15 females and 25 men attending. The main facilitators for the exercise were the community facilitator, adult education officer, Kenya libraries representative, and the Director Ugunja Resource Centre.

School feeding program

The school feeding program aims at improving the nutrition of the pupils as well as enhancing their performance. The programme is currently running in three primary schools in the Sauri Millennium Village. Approximately 1860 are benefiting from the arrangement in the Bar Sauri, Nyamninia and Bar Turo primary schools.

Job training for the 14 school feeding sub-committee members (9 men and 5 women) has been conducted. The committee members gained knowledge and skills on costing and purchasing of various food stuffs applying the supply/demand principles. As a result they have been able to successfully purchase the food stuffs since the beginning of the year.

There was extensive sharing with the parents of the 3 schools (Bar Sauri, Nyamninia and Bar Turo) on the feeding options and their inbuilt contributions in the operational feeding program. Head teachers were given the responsibility of ensuring that the parents fulfill their pledges. During the same period, orientation of 12 (1 man 11 women) cooks, the 14 (5 women 9 men) feeding sub committee members and 3 (all men) Heads of the 3 primary schools on the measurements, preparation and serving of the meals was done. This has greatly assisted in achieving the desired standards in the school feeding

programme. The orientation process was led by Peninah (PhD student nutrition student in the MV project) and the Siaya district nutritionist.

BUSINESS DEVELOPMENT

July 2005-December 2005

Business Development Training

A five day business skill training workshop was run for interested individuals and the business committee in Sauri by Grace H. A. Okello, Director of the Center for Entrepreneurship Development and Gender Issues. Topics Ms. Okello included in her training were: leadership, gender issues in leadership, business management, identification and registration of a business, constraints and challenges of running a business in Sauri, record keeping, income and expenses, costing, pricing, buying and selling on cash and on credit, how to use profit, community mobilization and business culture, financing the small business, obtaining loans from savings and credit organizations, and developing a simple business plan. The workshop was attended by 21 participants of whom 16 were women. The eleven smaller villages of Sauri were adequately represented to facilitate the trickle down effect of the information to all members of the greater Sauri millennium village. One of the goals of business training was to “train the trainers” enabling the participants to share the benefit of their training with other villagers.



CARE-Kenya has also been popularizing table banking in the village and this has helped bolster the principles of savings in the village.

During the same period, Shari Malone, a volunteer with the Millennium Villages Project, conducted a survey of the microfinance and business situation and potential opportunities for Sauri.

January 2006-June 2006

Millennium Villages Project is focused on empowering the responsible committee so that they are able to train the other people in village about business opportunities and skills. This sector is viewed as the most critical aspect in project with regard to sustainability. The people of Sauri should be financially empowered if they have to continue with interventions beyond the project life. As such the project is taking the lead in ensuring that proper linkages and partnerships thrive in the Sauri community with the

organizations and institutions that will offer both Micro finance and Business Development services.

A number of milestones have been recorded in the activities of the business sector. The activities have included research on Micro enterprise support for the Millennium Villages Project. The research picked Sauri as a test case and so that result would be applied in other villages across Africa with suitable modifications. The research was conducted by the students from Columbia University, School of International and Public Affairs.

The findings of the study can be summarized into four key areas: Demand for business development services, Demand for Micro Finance, the role of Micro enterprise development within the Millennium Village Project, Supply of Business Development Services (BDS) and finally the supply of Micro finance.

In reference to demand for micro finance services, it was found out that there are a significant number of people that use financial services and products; however, they are mainly informal savings and remittances services. The present scenario in Sauri was found out that most of the residents are using Merry Go Rounds, and about 30% of the population uses financial services offered through financial institutions such as banks and micro finance institutions.

The main recommendations included strengthening of the business committee as it is the interface of the project and the community. A vigorous awareness campaign was recommended for the Sauri community to be conscious of some of the typical problems that BDS can assist them solve. In terms of management of Enterprise department, it was recommended that the project have a coordinator both at the village and national level as mentioned before.

Redefinition and review of the roles of the business committee through meetings has been on going. This exercise has been in line with the findings in the report highlighted above. 50% of the membership of the business committee has now realized their roles in facilitating growth in the sector while training the entire community in business development. Initially the feeling was that the very business committee members would be involved doing the actual business in groups.

Table banking has been established and is going in two villages (Silula and Nyamninia A), after the lessons shared about the Rabbo Bank. The importance of this has been empowerment of women at the local level as they can access credit from their groups with terms that are quite favorable to themselves. The interest rates are low and their repayment is tailor made suiting the members.

The other important outcomes realized lately is bringing on board other partners to help in the provision of business development services and micro finance. These institutions include K-REP, Faulu Kenya, Sagam community development bank, KADET (Kenya Agency for the Development of Enterprise and Technology) and Equity bank. All these institutions have different loan products. The range of products that these organizations

have include solidarity loan, individual loan products, community bank loan, agriculture loan product, school fees loans products, savings product, business startup loan and banking services to groups at nominal fees.

ENVIRONMENT

July 2005-December 2005

The environment sector has witnessed a number of activities which include tree nursery establishment, tree planting activities and trainings.

Tree nursery establishment

26 members were registered for the tree nursery. The initial number registered was 44 but commitment by the members lacked and some withdrew their membership leaving only 26 active members. The members decided to consolidate their efforts and have village nurseries instead of individual ones.

The Environment Committee established 11 tree nurseries with an average of 200 seedlings, each of the villages in Sauri has a working tree nursery. Tree seedlings in the nurseries are mainly *Maesopsis spp* and *Albizia spp*, The setting up of the nursery in terms seeds and related expenses cost US \$ 1196.

Members participated in tree planting sessions in the last year's national tree planting day. The exercise was carried out in the month of June and a total of 255 seedlings were planted. The seedlings were from the Divisional Forest tree nursery. 80 were planted in the clinic compound while the rest were distributed among the members. Mainly the seedlings planted were *Maesopsis eminii*, *Makhamia lutea*, *Wambugia ugandensis*, *Moringa olifera*, *Casuarina equisetifolia* and *Prunus africana*.

Riparian zone protection

The environment committee contributed 265 seedlings for buffer protection around the water springs in Sauri. These seedlings were hardened off in December 2005 in readiness for transplanting once the long rains of the following year commence in February 2006

Environment committee training

It was realized that an earlier training conducted did not give the committee enough skills for proper management of the nurseries and this contributed to the poor performance of the tree nurseries. Thus, another training was conducted to enhance better management of tree nurseries. Twenty six (26) members of the Environment committee were trained for three days including a day's trip to Maseno Kenya Forestry Research Institute (KEFRI) station. The training was conducted by the District Environmental Management Officer and the Divisional Forester Yala. The KEFRI staff helped with facilitation of the tour. The tour was meant to orientate the committee on a well established nursery set up

January 2006-June 2006

The first half of the year was generally wet with only the month of February experiencing very harsh weather conditions. This somehow did not auger well with most of the nursery activities in the village and most of the committee members lost the seedlings due to lack of access to water. However, with the provision of watering cans, the situation improved and a fairly good percentage of the seedlings were salvaged.

Root pruning

After skills acquisition on nursery Management, the members were able to carry out the exercise of root pruning on the 11 nurseries in the villages. A few of the seedlings were lost because the roots had overgrown and gone deep into the ground. A total of 2000 seedlings were salvaged after the drought and 265 were planted along the protected springs.

Nursery preparation

In tree nursery preparation and acquisition of seeds, the environment committee procured and planted in the 11 nurseries distributed in the village. Most of the seeds germinated and were pricked out. The species that were planted included *Albizia spp*, *Moringa oleifera* and *Prunus Africana*.

Two rolls of polythene tubes were given to the committee for potting the seedlings. The support translated to 8,000 pieces of tubes towards the establishment of the nurseries and it is anticipated that at least 7,000 seedlings will be available in the next season for planting. Some of the tubes were given to school nursery in Bar Sauri Primary School.

The collection of tree seedlings for Community tree planting day was conducted to acquire seedlings for planting both in the schools and in the community. The seeds were collected from Yala forest nursery as well as Maseno Kenya Forestry Research (KEFRI) Station. The KEFRI station gave out 200 seedlings of diverse species. The Yala government tree nursery contributed about 1100 seedlings. The Agriculture/Environment facilitator and the divisional forest officer coordinated the exercise of seedling collection. Community Tree Planting Day held on 6th of June was carried out with the aim improving the tree cover in the farms for environmental sustainability. The exercise was carried out both at Bar Turo and community wide where each person who attended the tree planting day got a seedling for subsequent planting at home. The attendance on the occasion was fairly impressive with an audience of slightly over two hundred participants. 40 % of these were ladies. The divisional facilitator coordinated the exercise and other project staff coordinated this occasion.

VISITORS TO SAURI MILLENNIUM RESEARCH VILLAGE

July 2005-December 2005

Millennium Village Project has had many visitors who have visited the Sauri Village. These visitors came from different organizations, some of them came to consult, learn from the project implement and advise on different fields of specialties and therefore their objectives have varied. A full list of visitors is available in Appendix A.

The visits especially the international ones were organized by both the Nairobi and Kisumu office. The MVP office Kisumu (Evelyn) normally liaises with the MDG Nairobi (Neccah) in cases of incoming visitors for hotel reservations, pick ups from the airport and ticket bookings. The visitors are then taken to the field (Sauri Village) for the experience of the progress. The other staffs involved in handling the visitors include Dr. Patrick Mutuo (the Program Manager), Willis Ombai (Program Assistant) and Chris Ekise (Driver).

Cost Sharing for Village Activities

July 2005-December 2005

Millennium Villages Project is planned to be implemented jointly with other collaborators and the community members. As such the project itself, the government of Kenya, other donors and the community has put up a spirited effort towards the achievement of the overall goal of Millennium Development Goals. The involvement of the partners in the project has seen each party's contributions in terms of labor, material and even on some occasion cash.

The cost sharing for village activities has been analyzed up to the end of December 2005. The statistics below therefore pertain to the period between January 2005 and December 2005. Cost sharing for the latter half of the 2005-06 fiscal year are still being analyzed, and will be included in the next financial report.

a) The Costs/Expenses met by Millennium Villages Project

The project on its part met most of the expenses mainly in cash. All the sectors have seen a lot of investment by the project in different proportions. The agriculture sector takes the largest share of 39.5% followed closely by health with a figure of 33.6%. Most of agricultural expenses were spent in the purchase of fertilizer, crop seeds and agro forestry seeds. Wages was also a major cost center in the agriculture sector. In health, clinic construction, supply of essential medicine, wages and purchase of long lasting treated mosquito nets, training and supplies were some of the key areas in the expenditure. Other departments that also took considerable amounts include socio economic and non health with 8.9%, infrastructure and energy takes 8.1%. Education sector takes 7.9% of the budget while Water and Sanitation on the other hand takes 1.4%. In education for instance some of the key areas of expenditure have been the school feeding programme, sponsorship of students as well as training. Investment made by the project in environment was 0.6% and the bulk of the expenses were incurred in the purchase of tree seeds for tree nursery establishment and trainings. The project however, made the highest investment in the project in the first year of the project with about 71% (U\$248,767). This expenditure overshoot the project contribution by 21% as it was planned to contribute 50% of the total budget.

b) Government Contribution

The government contribution in year one which was mainly constituted by the staff placement by the relevant ministries and that accounts for the large contribution in

expertise. The material contribution comprised of chemicals for dusting maize, electrification of the village, books contributed to the community learning resource centre, drugs kit to the dispensary and tree seedlings in the environment sector.

The government contributed 13% (US\$ 45,349) of the total budget for year one and as indicated above the largest share resulted from the wages that the government pays to its employees who are placed with the project. The infrastructure sector realized the biggest contribution from the government of about 80.5%. The bulk of the expenses under infrastructure went to repair of access roads and purchase of transformers for rural electrification. Agriculture took 6.7% of the government contribution in the project in the first year, health 6.2% with most the expenses being for drugs and training. Socio Economic and Non Health took 3.1%, Information and Technology took 1.1%, water and sanitation took 2.2% and education 0.3% of the government contribution.

c) Other donors' contribution

Other donors have also come in to realize the achievement of Millennium Development Goals. These donors have contributed significantly in the diverse sectors of the project. The other donors to the project made their contribution in cash, material and technical advice. Some of the notable donors and the respective sectors in which they made their contribution included:

- Safe Water & AIDS (Rotary), Regional Land Management (RELMA) in the water sector.
- Food and Agriculture Organization (FAO) and A.A. Bux transporters in Agriculture sector.
- Yara East Africa, Robert Kozma and Community Development Trust in Education sector
- Centre for Disease Control in health sector.

The distribution of other donors' contribution per sector was reflected as follows in the first year of the project:

Table 19. Proportion of other donor contributions per sector

Sector	Percentage	Major activity supported
Agriculture	4.6	Trainings and supplies.
Education	63.9	Renovation and school maintenance
Health	1.6	Antiretroviral Treatment
Water and Sanitation	29.9	Construction of tanks and training

Overall, the other donors contributed 10% (US \$34,598) of the total budget spent in year one of the project. This fell below the projected 20% from other donors' contribution.

d) The community contribution to the project

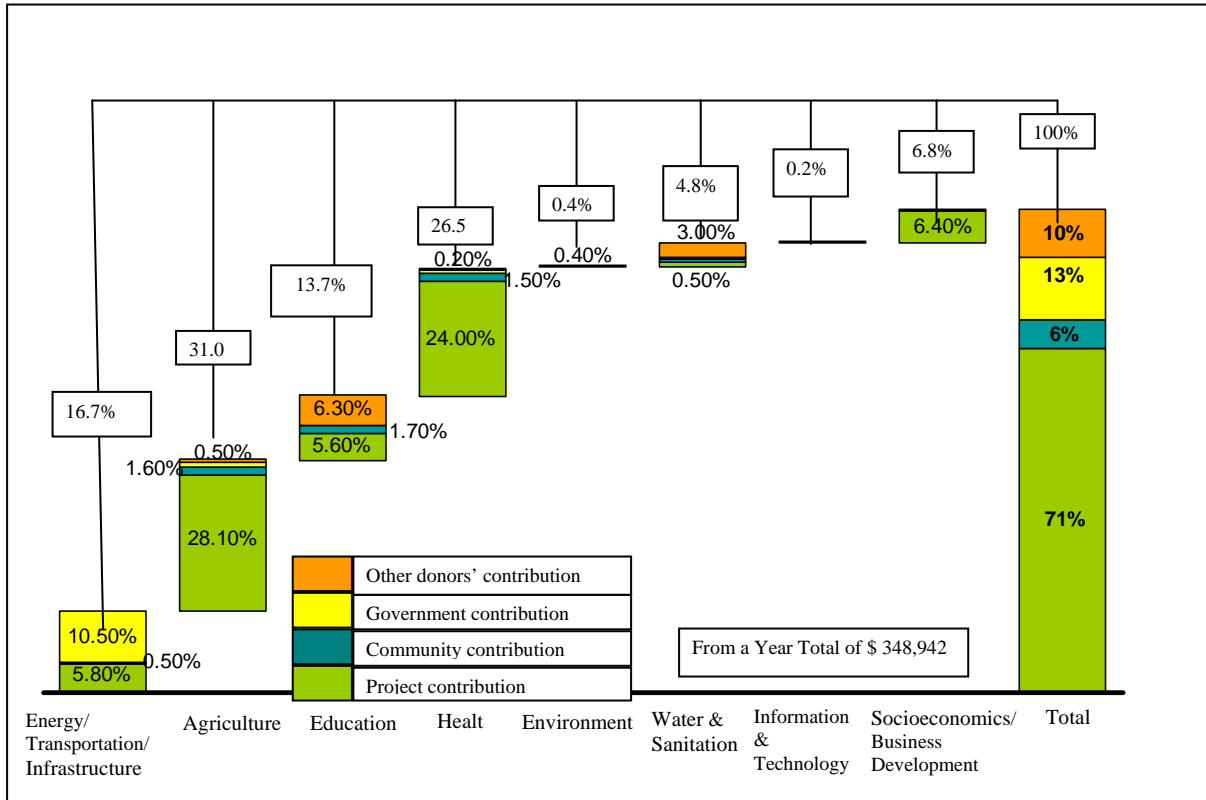
The community made their contribution in the form of materials, skilled and unskilled labor, and volunteer management time, as well as a small portion directly in cash which

was witnessed in all the sectors. The community contribution was an equivalent of US\$ 20, 227 in labor and material forms. This translated into 6% of the total budget in year 1. The distribution of community contribution in the first year of the project in the various sectors is presented in Table 20.

Table 20. Distribution of community contribution per sector in the first year

Sector	Percentage	Major activity supported
Health	26.5%	Clinic construction, labor during the distribution of the mosquito nets and trainings
Water and Sanitation	9.2%	Rain water harvesting and spring protection
Agriculture	27.1%	Training, crop seeds (manual labor), cereal banking and manual labor in the handling of improved fallow seeds.
Education	29.0%	School meals program, renovation and maintenance at schools and CLRC and trainings.
Energy and infrastructure	8.0%	Access roads repair, construction of energy kiosk and contributions during trainings.
Environment	0.2%	Woodlot and Nursery establishment.

Figure 6. Sauri first year village specific contributions percentage of total expenses, January 2005 to December 2005.



Appendix A

Visitors Hosted by the Project from July 2005-June 2006

July 2005-December 2005

Date	Name of the Visitor	Name of Institution of Origin/Affiliation	Objective of the visit/ Remarks
30 th June 2005	Dr Julius Ndambuki	Moi University	Water student research discussion
2 nd July 2005	Steven Lewis team (6)	UN Aids	Familiarization with MVP
8 th July 2005	Joy Tarter/Barbara	Donors	Seeking collaboration
21 st July 2005	Jeff, Anne Veneman, ministers and team (45)	Donors, MP, Government, UN	Harvest festival
18 th August 2005	Jeremy Hunt & Alex Williams	British Parliament,	Familiarization with MVP
20 th August 2005	J.Nkuuhe & 18 Uganda parliamentarians	Uganda parliament	Familiarization with MVP
24 th August 2005	Africa Now (Team of 6)	Africa Now	Seeking collaboration
26 th Aug 2005	David Nembucha	USIU	Collaborative research meeting
27 th Aug 2005	Prof. Buyu (DVC)	USIU	Collaborative research meeting
29 th Aug 2005	Louise Sorensen (team of 4)	FAO	Farmer Field Sch. discussions
30 th Aug 2005	Dr. Ndambuki	Moi University	Collaborative research meeting
3 rd Sept 2005	NMK team (4)	MOA & JICA	Familiarization with MVP (Agric.)
6 th Sept 2005	Koert Lindijer and Ilona Eveleens	Dutch Media	Journalist
12 th Sept 2005	Roy	Norwegian paper & CNN	Journalist
24 th , Sept 2005	Nurses Country representatives	Ministry of Health	Familiarization with MVP (health)
28 th – 30 th Sept 2005	Bruce Schearer	Millennium promise	Familiarization with MVP
29 th Sept 2005	Ewan Hunter	Hunter Foundation	Donor visit
3 rd Oct 2005	Patrick Lodiars		
6 th -10 th Oct 2005	Bob Kozma & Shari Malone	New York	Information and Business research

10 th Oct 2005	Ingegerd Rafn and 9 YARA staff	Yara International	
14 th Oct 2005	Jessie Bokhoven	SNV	Donor Visit
21 st Oct 2005	Nancy Mungai	Egerton University	student research discussion
24 th , Oct 2005	NMK team (5)	Njaa Marafuku Kenya (NMK)	Familiarization with MVP
7-9 th Nov2005	Craig Baleta	Motorola	Partnership in ICT
17 th Nov2005	Erin, Martins, Luis & Johansson	UN MP and LA Times	Journalists
28 th Nov2005	Richard Graham		
3 rd Dec, 2005	Nalan	NMK, World hope, RF, Sacred Africa	Familiarization with MVP (Agric.)
9 th Dec, 2005	Narok NMK officials (6)	NMK	Familiarization with MVP (Agric.)
12 th Dec, 2005	Darnen & Meredith		
18 th Dec, 2005	Brandon		

January 2006-June 2006

Date	Name of the Visitor	Name of Institution of Origin/Affiliation	Objective of the visit/ Remarks
01/26/06	Niki Hikaru	JICA	Learn from experiences of Sauri
01/27/06	Marie Rarieya and Prof. Kings	Renssealer Polytechnic Institute in New York	Supervision of Marie Rarieya
01/28/06	Team members from other Millennium Villages across Africa	Millennium Villages Projects Across Africa	Visit the project site
01/30/06	Kathleen, Enver, Margot, Kajal Shah, Steve Grin (SIPA students)	Columbia University	Conduct Research in Microfinance in Sauri
02/28/06	Mattias and Jonathan Ledgard	The Economist	Media coverage of Sauri
03/01/06	MCKinsey team	MCKinsey foundation	Visiting Sauri
03/02/06	SIPA Students	New York/School of International and Public Affairs (Columbia Univ.)	Conducting Research on Micro Finance in Sauri
03/09/06	Tony Chovwen and other village managers from Nigeria	Nigerian Millennium Villages Project.	Learning from Sauri Experience
03/12/06	Karen Wang	New York/Earth	Data Analysis

		Institute At Columbia University	
03/13/06	CIDA team (Group of teachers from Canada)	CIDA	Visiting Sauri to learn experiences from Sauri
03/13/06	Thomas Van Set	Waterloo University & Matengwe Community Development Group	Learning Community Development structures in Sauri
03/14/06	Jennifer Basky	Nike Foundation	Visit Sauri for the gender aspects
03/14/06	Cristina Rumbaitis Del Rio	Argentina/US (Earth Institute at Columbia University)	Working on the Cross Cutting Initiatives
03/14/06	Peninah Masibo	Moi University	Student doing doctoral studies in Nutrition
03/22/06	Mattias Johnson and journalists from Associated Press	Associated Press	Media coverage of Sauri
03/22/06	Ministry of Health and Public Works	Government of Kenya	Visit to the Clinic at Sauri
03/24/06	Josephine and Tich Students	TICH University	Sauri Clinic
03/27/06	Joseph Kaiza and Tabora Team	Millennium Village in Tanzania	Learn from Sauri experience
03/28/07	Anthony Bovine and Team	Technoserve	Pursuit of Enterprise Development collaboration
03/30/06	Joel Negin and Rehana	National AIDS Control Council – Columbia University	Visit to provincial hospital and other collaborators
04/11/06	Sarah Gikonyo and team members	Njaa Marufuku Kenya	Assessments of the school feeding programme
04/26/06	Justin Nobel	Columbia University	Student studying environmental journalism esp. birds
05/04/06	Lisa Dacosta and Mozambican Team	UNDP Mozambique	Visit to Sauri
05/06/06	ABC News -Journalists	ABC News	Media Coverage of Sauri
05/16/06	Eba and Donar Omulo	German Press and Reuters	Media coverage of Sauri
05/17/06	Sue Zamkov and Martha Stack and other members	World Economic Forum	Exploring opportunities for cooperation with MVP
05/20/06	Gary Cohen and Ken Osano	BD Health Group	Assessment for

			Laboratory Equipments in Sauri and Yala Sub district hospital
05/24/06	Locky Chambers	Student at Columbia University	Assisting in the establishment of Medical records
05/27/06	Carey Bollinger	Columbia University	Familiarization tour of the village
06/07/06	Dr. Richard Brown	Nazareth Hospital Kiambu	Observing what is being done in the health sector in the MVP.
06/08/06	Susan Grove	International Institute of Rural Reconstruction	An overall view of what is going in the project
06/12/06	Sarah Suter	Technoserve	Undertaking consultancy on the feasibility of sunflower production in Sauri
06/13/06	Prof. Beth E. Kolko	University of Washington	Interest in communication technology
06/15/06	Mattias, Laura and Cathy	La Republica and VOA	Coverage of developments in Sauri
06/19/06	James, Teresa Wolters and other Millennium Promise Visitors	Millennium Promise	Visit and view the developments in the Cluster
06/19/06	Francois Bourguignon	World Bank	Learn the progresses made in Sauri
06/20/06	Robert Fitzgerald, Beatrice , Alex, Carol MacBright	US peace corps	View of developments in Sauri
06/21/06	Christian Doer and team members	Pangea	Overall to learn what is happening in Sauri
06/25/06	Myriah Morris	Columbia University	Studies in Food security
06/27/06	Karanja George	Finnish Embassy	Learn from Sauri experience in the Implementation of the MDGs
06/28/06	Eric Hand and Stefan Ehart	St Louis Dispatch and Berliner Press	Media coverage of Sauri

